#### TEST I

## Passage 1

Astrologers habitually prone to goof-ups now have an excuse for why their predictions have been going haywire, the emergence of newer and newer planets that have caused their calculations to go awry. For the international team of astronomers who recently discovered eight new planets, the arrivals are, however, a cause for excitement. Indeed, even as the rest of the world continues to be consumed by a morbid passion for shiny new war machines, deadly chemicals and sinister war tactics, astronomers have been doggedly searching the heavens for more heavenly bodies in the belief that the search will take us closer to a more exalted goal—that of knowing the truth about us and the universe. "Reality is much bigger than it seems... the part we call the universe is the merest tip of the iceberg" one scientist remarked. How true. In the beginning, skeptics wouldn't accept that the earth actually moves, let alone that it revolves around the sun because of an unshaken belief that the earth was the centre of the universe. We've come a long way. Today, scientists have spotted nearly 80 extra-solar planets using sophisticated instruments. What's more, our universe may not be the only universe in the cosmos; there could well be several parallel universes teeming with many galaxies, solar systems and planets, although none of this may be perceptible to the naked eye. Perhaps sages who say that truth is not easily perceptible, mean just this—what is evidently before us is not the whole truth.

Scientists say that "everything in the tangible universe has its shadowy counterpart in other, parallel universes". In fact, it is by observing the play of cosmic light and shadow through powerful devices that scientists have been able to 'feel' shapes or 'see' shadows that indicate the existence of other heavenly bodies without actually seeing them. The international team of scientists involved in the present discovery conducted their search through telescopes in Austra-

lia, Belgium, UK and the US. Two of the newly discovered eight planets are believed to have circular orbits very like the Earth's, while the others have well-defined elliptical orbits much like Pluto's. This is significant because a planet with a circular orbit would more likely be hospitable to life forms than would one with an elliptical orbit. In the latter, the planet experiences extreme temperatures depending on whether it is proximate to or distant from the energy-giving star it's circumambulating. As in the case of other recent discoveriessuch as finding traces of microbes in a meteorite—this too strengthens the belief that we're not alone in the universe. So would we be exchanging inter galactic e-mails soon? Perhaps not as yet, given that our closest neighboring galaxy is millions of light years away. What is within our immediate grasp, though, is exploring the viability of establishing human settlements in space—an endeavor that has assumed urgency what with biological terrorism and the like threatening humankind on earth. As Stephen Hawking recently said, "I don't think the human race will survive the next thousand years unless we spread into space. There are too many accidents that can befall life on a single planet".

- 1. According to the author's belief, it can be inferred that all of the following are not true except
  - (a) It is unlikely that the human race can survive the next thousand years.
  - (b) It seems quite likely that the human race can survive the next thousand years.
  - (c) Accidents will wipe out the human race from this planet by accidents within the next one thousand years.
  - (d) Earth is the only planet with life.
  - (e) The age of human race is one thousand years.
- 2. According to the passage it can be inferred that:
  - (a) Finding traces of microbes in a meteorite proves the existence of life on other planets.

- (b) Finding traces of microbes in a meteorite converted the belief into truth that we are not alone in the universe.
- (c) Finding traces of microbes in a meteorite would make it possible to exchange galactic e-mails in future.
- (d) Finding traces of microbes in a meteorite made us think about exploring the viability of establishing human settlements in space.
- (e) None of these can be inferred.
- 3. According to the passage it can be inferred that
  - (a) A planet with a circular orbit is more likely to be hospitable to life than would one with an elliptical orbit because the latter experiences very low temperatures.
  - (b) A planet with a circular orbit is more likely to be hospitable to life form than would one with an elliptical orbit since the latter is proximate to the energy-giving star it is circumambulating.
  - (c) A planet with a circular orbit is more likely to be hospitable to life forms than would one with an elliptical orbit because the latter experiences extreme temperatures.
  - (d) Both (a) and (c).
  - (e) (a), (b) & (c).
- 4. According to the passage, we can infer that
  - (a) Parallel universes are half truth and half truth is not perceptible
  - (b) Parallel universes are not easily perceptible because they are not the whole truth.
  - (c) Parallel universes are not easily perceptible and what we perceive is not the whole truth.
  - (d) Truth is always easily perceptible.
  - (e) Parallel universes do not exist.
- 5. After the discovery of new planets, according to the passage, scientists are
  - (a) euphoric.
  - (b) jubilant.
  - (c) enthusiastic.
  - (d) elated.
  - (e) joyous.

In those days, there was no forum in DRDL where issues of general importance could be openly discussed and decisions debated. Scientists, it must be remembered, are basically emotional people. Once they stumble, it is difficult for them to pull themselves together. Setbacks and disappointments have always been and always will be an inherent part of any career, even in science. However, I did not want any of my scientists to face disappointments alone. I also wanted to ensure that none of them set their goals when they were at a low ebb. To avoid such eventualities, a Science Council was created—a sort of panchayat where the community would sit together and take common decisions. Every three months, all scientists—juniors and seniors, veterans and freshers—would sit together and let off steam.

The very first meeting of the council was eventful. After a spell of half-hearted enquiries and expressions of doubt, one senior scientist, MN Rao, shot a straight question: "On what basis did you select these five Pandavas (he meant the Project Directors)?"

I was, in fact, expecting this question. I wanted to tell him I found all these five Pandavas married to the Draupadi of positive thinking. Instead, I told Rao to wait and see. I had chosen them to be in charge of a long-term programme where new storms would arise everyday.

Every tomorrow, I told Rao, will give opportunities to these enthusiastic people—the Garwals, Prahlads, lyer and Saraswats—to gain a fresh perspective on their goals and a strong hold on their commitment.

What makes a productive leader? In my opinion, a productive leader must be very competent in staffing. He should continually introduce new blood into the organization. He must be adept at dealing with problems and new concepts. The problems encountered by an R&D organization typically involve trade-offs among a wide variety of known and unknown parameters. Skill in handling these complex entities is important in achieving high productivity. The leader must be capable of instilling enthusiasm in his team. He should give appropriate credit where it is due; praise publicly, but criticize privately.

One of the most difficult questions came from a young scientist: "How are you going to stop these projects from going the Devil's way?" I explained to him the philosophy behind IGMDP—it begins with design and ends in deployment. The participation of the production centres and

user agencies right from the design stage had been ensured and there was no question of going back till the missile systems had been successfully deployed in the battlefield.

While the process of forming teams and organzing work was going on, I found that the space available at DRDL was grossly inadequate to meet the enhanced requirements of IGMDP. Some of the facilities would have to be located at a nearby site. The missile integration and checkout facility built during the Devil phase consisted only of a 120 sq. meter shed thickly populated with pigeons. Where was the space and the facility to integrate the five missiles which would arrive here shortly? The Environmental Test Facility and the Avionics Laboratory were equally cramped and ill equipped.

I visited the nearby Imarat Kancha area. It used to be the test range for anti-tank missiles developed by DRDL decades ago. The terrain was barren—there were hardly any trees and dotted with large boulders typical of the Deccan plateau. I felt as if there was some tremendous energy trapped in these stones. I decided to locate the integration and checkout facilities needed for the missile projects here. For the next three years, this became my mission.

- 6. It can be inferred from the passage that
  - I. emotions are a drawback for scientists.
  - II. scientists fail to pull themselves together when they stumble.
  - III. scientists should be helped by fellow scientists to overcome setbacks.
  - (a) I, II and III
  - (b) I and II
  - (c) II and III
  - (d) III and I
  - (e) III only
- 7. It can be inferred from the passage that goal setting should not be done when one is at a low ebb because
  - 1. disappointments are likely to retard a person's thinking capacity.
  - 2. setbacks limit a person's perceptions about his potential.
  - 3. a person on his own can't think on reasonable terms.
  - (a) All three
  - (b) 1 and 2
  - (c) 2 and 3

- (d) 1 only
- (e) 2 only
- 8. It can be inferred from the passage that the science council
  - I. served its purpose.
  - II. was an excellent platform for interaction.
  - III. meetings were jeopardized by every member flinging accusations against each other.
  - (a) II and III
  - (b) I and III
  - (c) I and II
  - (d) I only
  - (e) II only
- 9. The author selected the five Pandavas because
  - I. they had exemplary positive thinking traits.
  - II. he had faith in their capacity to meet unforeseen challenges.
  - III. he wanted the Pandavas to grow from the difficulties that could pose ahead.
  - (a) All three
  - (b) II and III
  - (c) I and II
  - (d) I only
  - (e) II only
- 10. According to the passage a productive leader should have the following traits:
  - I. Should have an open mind, enabling him to tackle problems from new avenues.
  - II. Should recruit greater number of young people as compared to old people.
  - III. Should be adept at handling his subordinates.
  - (a) I and III
  - (b) I and II
  - (c) I, II and III
  - (d) II and III
  - (e) III only

#### Passage 3

The 1983 re-organization was done with the objective of renewal; it was indeed a very complex exercise handled deftly by A.V. Ranga Rao and C.R. Swaminathan. We created a team

of newly joined young scientists with just one experienced person and gave them the challenge of building the strap down inertial guidance system, an-on board computer and a ram rocket in propulsion system. This exercise was being attempted for the first time in the country and the technology involved was comparable with world-class systems. The guidance technology is centered around the gyro and accelerometer package, and electronics, to process the sensor output. The on-board computer carries the mission computations and flight sequencing. A ram rocket system breathes air to sustain its high velocity for long durations after it is put through a booster rocket. The young teams not only designed these systems but also developed them into operational equipment. Later, Prithvi and then Agni used similar guidance systems, with excellent results. The effort of these young teams made the country self-reliant in the area of protected technologies. It was a good demonstration of the 'renewal factor'. Our intellectual capacity was renewed through contact with enthusiastic young minds and had achieved these outstanding results.

Now, besides the renewal of manpower; emphasis had to be laid on augmenting the strength of project groups. Often, people seek to satisfy their social, egoistic and self actualization needs at their workplaces. A good leader must identify two different sets of environmental features. One, which satisfies a person's need and the other, which creates dissatisfaction with his work. We have already observed that people look for those characteristics in their work that relate to the values and goals which they consider important as giving meaning to their lives. If a job meets the employees' need for achievement, recognition, responsibility, growth and advancement, they will work hard to achieve goals.

Once the work is satisfying, a person then looks at the environment and circumstances in the workplace. He observes the policies of the administration, qualities of his leader, security, status and working conditions. Then, he correlates these factors to the interpersonal relations he has with his peers and examines his personal life in the light of these factors. It is the agglomerate of all these aspects that decides the degree and quality of a person's effort and performance.

The matrix organization evolved in 1983 proved excellent in meeting all these requirements. So, while retaining this structure of the laboratory, we undertook a task-design exercise. The scientists working in technology directorates were made system managers to interact exclusively with one

project. An external fabrication wing was formed under P.K. Biswas, a developmental fabrication technologist of long standing, to deal with the public sector undertakings (PSUs) and private sector firms associated with the development of the missile hardware. This reduced pressure on the in-house fabrication facilities and enabled them to concentrate on jobs which could not be undertaken outside, which in fact, occupied all these three shifts.

- 11. The author's choice of the team indicated his
  - I. lack of faith in the older generation to achieve things.
  - II. bias towards younger scientists.
  - III. perception of the level of difficulty of the project.
  - (a) Only I
  - (b) I and III
  - (c) II and III
  - (d) I, II and III
  - (e) Only II
- 12. From the passage it can be inferred about the project
  - I. India had attained nothing of the ilk before.
  - II. project components were developed indigenously.
  - III. laudable efforts were made by the team members.
  - (a) III only
  - (b) II and III
  - (c) III and I
  - (d) I, II and III
  - (e) II and III
- 13. It can be said about the renewal factor that
  - (a) It was responsible for the project's success.
  - (b) The young were rejuvenated on coming in contact with the experienced.
  - (c) The old scientists were refocused on their job.
  - (d) The young intellectually stimulated the experienced.
  - (e) The young and old gelled together.
- 14. The following traits of a good leader are evident from the passage:
  - I. Should be able to identify the contradicting environmental features to which a person reacts.
  - II. Should keep a tab on a person's individual need fulfillment.

- III. Should well understand the external factors which dissatisfy a person.
- (a) All three
- (b) I and II
- (c) II and III
- (d) I and III
- (e) Only I
- 15. From the passage it can be inferred that
  - I. social, egoistic and self-actualization needs could be catastrophic at the workplace.
  - II. social, egoistic and self-actualization needs are catastrophic at the workplace.
  - III. social, egoistic and self-actualization needs should be eliminated.
  - IV. social, egoistic and self-actualization needs should be taken care of.
  - (a) I and III
  - (b) I and IV
  - (c) II and III
  - (d) IV only
  - (e) II and IV

Not even a three-day brainstorming session among top psychologists at the Chinese University could unravel one of the world's greatest puzzles—how the Chinese mind ticks. Michael Bond had reason to pace the pavement of the Chinese University campus last week. The psychologist who co-ordinated and moderated a three-day seminar in Chinese psychology and most of the participants came a long way to knock heads. "If a bomb hits this building," muttered Bond, half-seriously, "it would wipe out the whole discipline." But the only thing that went off in the Cho Yiu Conference Hall of Chinese University was the picking of brains, the pouring out of brains and a refrain from an on-going mantra: "more work needs to be done" or "we don't know". Each of the 36 participants was allowed 30 minutes plus use of an over-head projector to condense years of research into data and theories. Their content spilled over from 20 areas of Chinese behaviour, including reading, learning psychopathology, social interaction, personality and modernisation. An over-riding question for observers, however, was why, in this group of 21 Chinese and 15 non-Chinese, weren't there more professionals from mainland

China presenting research on the indigenous people? Michael Philips, a psychiatrist who works in Hubei Province, explained: "The Cultural Revolution silenced and froze the research," said the Canadian-born doctor who has lived and worked in China for more than 10 years. "And 12 years later, research is under way but it is too early to have anything yet. Besides, most of the models being used are from the West anyway." In such a specialised field, how can non-Chinese academics do research without possessing fluency in Chinese? Those who cannot read, write or speak the language usually team up with Chinese colleagues. "In 10 years, we won't be able to do this. It's a money thing," said William Gabrenya, of Florida Institute of Technology, who described himself as an illiterate gweilo who lacks fluency in Chinese. He said that 93 per cent of the non-Chinese authors in his field cannot read Chinese. Dr. Gabrenya raised questions such as why is research dependent on university students, why is research done on Chinese people in coastal cities (Singapore, Taiwan, Shanghai and Hong Kong) but not inland? "Chinese psychology is too Confucian, too neat. He's been dead a long time. How about the guy on a motorcycle in Taipei?" Dr. Gabrenya said, urging that research have a more contemporary outlook. The academics came from Israel, Sweden, Taiwan, Singapore, United States, British Columbia and, of course, Hong Kong. Many of the visual aids they used by way of illustration contained eyesquinting type and cobweb-like graphs. One speaker, a sociologist from Illinois, even warned her colleagues that she would not give anyone enough time to digest the long, skinny columns of numbers. Is Chinese intelligence different from Western? For half of the audience who are illiterate in Chinese, Professor Jimmy Chan of HKU examined each of the Chinese characters for "intelligence". Phrases such as "a mind as fast as an arrow" and connections between strokes for sun and the moon were made. After his 25-minute speech, Chan and the group lamented that using Western tests are the only measure available to psychologists, who are starving for indigenous studies of Chinese by Chinese. How do Chinese children learn? David Kember of Hong Kong Polytechnic University zeroed in on deep learning versus surface. Deep is when the student is sincerely interested for his own reasons. Surface is memorising and spitting out facts. It doesn't nurture any deep understanding. If the language of instruction happens to be the children's second language, students in Hong Kong have all sorts of challenges with English-speaking teachers from Australia, Britain and America with accents and colloquialisms. Do

Westerners have more self-esteem than Chinese? Dr. Leung Kwok, chairman of the psychology department of Chinese University, points his finger at belief systems: the collectivist mind-set often stereotypes Chinese unfairly. The philosophy of "yuen" (a concept used to explain good and bad events which are pre-determined and out of the individual's control) does not foster a positive self-concept. Neither do collectivist beliefs, such as sacrifice for the group, compromise and importance of using connections. "If a Chinese loses or fails, he has a stronger sense of responsibility. He tends to blame it on himself. A non-Chinese from the West may blame it on forces outside himself," Dr. Leung said. By the end of the three-day session, there were as many questions raised as answered. It was agreed there was room for further research. To the layman, so much of the discussion was foreign and riddled with jargon and on-going references to studies and researchers. The work of the participants will resurface in a forthcoming Handbook of Chinese Psychology, which will be edited by Dr. Bond and published by Oxford University Press.

- 16. According to the passage the author suggests that:
  - (a) the building is in danger of attack.
  - (b) not many people study Chinese psychology.
  - (c) Chinese psychology is a difficult subject to study.
  - (d) Chinese psychology is a difficult subject to organize.
  - (e) Chinese psychology is outdated.
- 17. It can be inferred from the passage that:
  - (a) the cultural revolution was a dangerous period for Chinese psychology.
  - (b) the cultural revolution was a productive period for Chinese psychology.
  - (c) the cultural revolution was an unproductive period for Chinese psychology.
  - (d) the cultural revolution was a new beginning for Chinese psychology.
  - (e) the cultural revolution renewed Chinese Psychology.
- 18. According to the passage, William Gabrenya refers to himself as an 'illiterate gweilo'. This suggests that:
  - (a) he feels secure in his illiteracy.
  - (b) he feels defensive about not speaking and reading Chinese.
  - (c) he is representative of other westerners active in this field.

- (d) he can operate perfectly well without learning Chinese.
- (e) He does not know to read and write Chinese.
- 19. According to the passage, all of the following are true except:
  - (a) the conference attracted a very professional standard of presentation.
  - (b) the visual aids were not very easy to understand.
  - (c) the visual aids were not very tidy.
  - (d) the presenters were under time pressure.
  - (e) All of these.
- 20. According to the passage, which of the following is not true?
  - (a) It is difficult to come to a conclusion about western and Chinese intelligence.
  - (b) Chinese characters are very difficult for westerners to master.
  - (c) It is difficult to measure Chinese intelligence with western tests.
  - (d) More tests are required that are conducted by the Chinese for the Chinese.
  - (e) None of these.
- 21. Which of the following sources does the writer quote from in this passage?
  - (a) Confucius
  - (b) Chinese and Western academics
  - (c) Oxford University Press
  - (d) Journalists
  - (e) All of these.

#### Passage 5

The violence in Nepal, which has claimed over 280 lives in the last few days, has New Delhi worried for more reasons than one. For starters, instability has a way of spilling over international borders as India is only too well aware after what has happened in Afghanistan, Pakistan and Kashmir. India can also not ignore the fact that the Maoists in Nepal have strong ties with the Maoists Communist Centre (MCC) in Bihar, with which Nepal has an open border, and Jharkhand and with the People's War Group in Andhra Pradesh and Chhattisgarh. Not only does that increase the chances of spillover of the violence into India, it also means that any "success" that the Nepali Maoists achieve is likely to

embolden their counterparts in this country. Little wonder then that New Delhi is keeping a close watch on developments in the Himalayan kingdom. After all, the leader of the Nepal communist Party (Maoist), Pushpakamal Dehal alias Comrade Prachand, had only a few months back told his cadres that the real battle, after the NCP (M) defeated the police and the Royal Nepal Army would be to overthrow the constitutional monarchy and proceed to establish cross border linkages with their counterparts in India. New Delhi, thus would be forced to intervene if the NCP(M) succeeded in overthrowing the constitutional monarchy.

That assessment may be an overstatement, but there is little doubt that India can't be a silent spectator to the destabilization of Nepal, particularly by forces that are as openly hostile to India as the NCP(M). The climate of hostility against the regional "big brother" has already heated up of late, with the Bangladeshi Nationalist Party (BNP) winning the elections in Bangladesh and the fallout of the Afghan conflict likely to heighten anti-India sentiments in Pakistan. Whether India can do anything much about this in the immediate context is a moot point. However, it can make a serious attempt at setting things right in the medium to long term. The answer must lie in giving our neighbours an economic stake in friendly relations with India. SAARC, which has been a failure to date, must also be looked at afresh in this perspective.

- 22. According to the passage, India might face a rise in turbulence in view of:
  - (a) the nexus between NCP (M) and MCC.
  - (b) the link between NCP (M) and PWG.
  - (c) failure of SAARC.
  - (d) the nexus between the MCC & PWG.
  - (e) (a) and (b).
- 23. According to the passage, all of the following are not true except:
  - (a) There are some forces within Nepal which are more hostile to India than NCP(M).
  - (b) There are forces within Nepal which are less hostile to India than NCP (M).
  - (c) There are forces within Nepal which are equal in their hostility towards India with NCP (M).
  - (d) There are no forces within Nepal which are hostile to India.
  - (e) The Maoists have lost steam in Nepal.

- 24. India is closely monitoring the developments in Nepal because:
  - (a) they might tense the ties between the two countries.
  - (b) they might force India to intervene.
  - (c) Maoist forces may strengthen such forces in In-
  - (d) Developments in Nepal have economic repercussions for India.
  - (e) All of the above.
- 25. According to the passage, it would be in the long term interest of India to:
  - (a) suppress the anti India sentiments in Nepal.
  - (b) extend economic benefits to its neighbours.
  - (c) counter the influence of BNP in Bangladesh.
  - (d) Quell insurgency in neighbouring states.
  - (e) All of the above.
- 26. According to the passage
  - (a) anti-India sentiment in Pakistan existed previously also.
  - (b) anti-India sentiments in Pak emerged only after the Afghan conflict.
  - (c) anti-India sentiments in Pak broke out after the victory of BNP in Bangladesh.
  - (d) (b) and (c) both.
  - (e) All of a, b & c.

# TEST 2

# Passage 1

It is a measure of our obsession with the K-word and Pakistan, that the six-day state visit of Chinese premier Zhu Rongji to the Indian shores has barely created a ripple in the media. Apart from the odd ministerial statement and the mandatory picture of Mr. Zhu and his wife in front of the Taj, one could almost be excused for thinking that the Chinese premier—the second most powerful leader from the Middle Kingdom—was in India to pay a casual private visit. Let's face it: Beijing has emerged as a major world player in economic and strategic terms. If the long 20th century belonged to America, then the new millennium probably belongs to the oriental dragon. Part of the lukewarm Indian response has its roots in our genuine lack of knowledge of and interest in matters Chinese. Most of what we know about China is second-hand, mediated by the cares and concerns of the West. From policy institutions to strategic think tanks to swadeshi centres of higher learning, there is little Indian premium on first-hand information about our powerful eastern neighbour. The few images we have are inexorably bound up with bitter memories of the 1962 border war, namely, Beijing's betrayal in the face of Nehru's idealistic cries of "Hindi-Chini bhai bhai". In the four decades since, Indian Marxists might have kept their tryst with Mao and his market successors, but the mainstream political establishment has veered between paranoia and bouts of wistful envy about the economic miracle that is China.

The skeptic would argue that given the special ties that bind Beijing to Islamabad, there is little realistic possibility of a serious Indo-Chinese engagement. But that would be to misunderstand China's recent policy record both at home and abroad. From foreign affairs to economy, post-Mao China has displayed, barring political and human rights aberrations, a profound sense of pragmatism and a willingness to change. This is exemplified as much as in a steady improvement in our bilateral relations—notwithstanding a long-standing border dispute and the continued irritant of New Delhi's support for the Tibetan cause—as in Beijing's refusal to toe Islamabad's line on the all-important Kashmir issue. Post-September 11, there is also a shared concern on the issue of terrorism: Like New Delhi, Beijing too is haunted by the spectre of "terrorism", albeit on a smaller scale, in Xing Xiang province. Add to that Beijing's fears about Pax Americana, now including a potentially permanent US military presence in South Asia through Pakistan, and it gives policy wonks in New Delhi more than enough to chew on. Aside from strategic concerns and cooperation, Beijing today is a global economic player of exceptional strength and depth. India has so far, largely failed to learn or benefit from Beijing's brand of hardheaded market economics. While trade and investment between the two countries has increased in recent times, it is a mere pittance if viewed in the light of Beijing's annual trade of half-a-trillion dollars. If Mr. Zhu's visit can help re-focus the relationship between the two Asian giants, from sporadic suspicion and long-term indifference to sustained economic cooperation, then he will have done much to bring down the Chinese wall.

- 1. It can be inferred from the passage that Indo Chinese relations have traditionally been:
  - (a) warm and mutually supportive.

- (b) cold and uncaring.
- (c) beset with mutual suspicion and indifference.
- (d) both (b) and (c).
- (e) None of these.
- 2. According to the author of the passage,
  - (a) there is no possibility of a serious Indo-Chinese engagement.
  - (b) there is a serious lack of desire in China for a closer engagement with India.
  - (c) there cannot be a realistic and serious Indo-Chinese engagement given, the close ties between China and Pakistan.
  - (d) the Chinese have demonstrated that they are ready to move forward.
  - (e) There is a serious desire in China for a closer engagement with India.
- 3. According to the passage:
  - I. India was never interested in learning from the Chinese experience of market economics.
  - II. India couldn't recognize the importance of learning lessons from the Chinese experience of market economics.
  - III. India has rejected the Chinese model of market economics.
  - (a) I and III are correct
  - (b) Only III is correct
  - (c) Only II is correct
  - (d) I & II only
  - (e) None of these is correct.
- 4. According to the passage, potential meeting point(s) between China and India is/are
  - (a) Kashmir and Xing Xiang issues.
  - (b) The Terrorism issue.
  - (c) Pax Americana fear.
  - (d) Fears about American dominance.
  - (e) (b), (c) and (d).
- 5. According to the passage, Zhu Rongji is the
  - (a) Premier of China.
  - (b) Prime Minister of the oriental dragon.
  - (c) Prime Minister of the Middle Kingdom.
  - (d) President of the Middle East.
  - (e) All of the above.

It is not time yet to wear the national flag on your sleeve, but signs are that we might be getting there soon. Thanks to the passion of one citizen, it has become legally possible for ordinary Indians to freely fly the Tricolour. In 1993, Naveen Jindal thought that flying the national colours atop one's place of work gave everyone a "sense of belonging" but the authorities would not agree. Eight years later, having petitioned three prime ministers and waged a long legal battle, Mr. Jindal has at last been granted his wish. The archaic flag code has been changed. The Union cabinet has decreed that the citizen shall now have the right to fly the flag on any day. In India, unlike in western democracies, the flag had thus far been treated by the political class as a zealouslyguarded emblem of the state. From ministers to bureaucrats to higher-level judiciary, all arms of the state were allowed the automatic privilege of flaunting the flag, but not so the common people. Citizens wanting to express their identity or indeed their loyalty in a world becoming increasingly globalised and homogenized had, ironically, to seek the government's prior blessings to do so. Even this grudging nod was granted only for the duration of special days, namely, Independence Day, Republic Day and the Mahatma's birth anniversary. The thinking behind this 'saving the flag from the citizen' was a throwback to the days of the Raj when carrying the Tricolor was often regarded as an unacceptable symbol of defiance by our political masters. As has often happened in our history, however, this legacy was thoughtlessly upheld in the vastly changed post-Raj scenario.

In other words, even as India became a democratic republic, the state continued to treat the people's right to bear their national colors with suspicion. Under the obsessive pretext of preserving the honor and dignity of the flag, the assumption survived that the ordinary citizen of the realm could not be trusted to respect it. Wisely, the powers that be, have recognized the anachronism of such a mindset. But there is a further danger which must be guarded against. In time, as flag-waving is exploited commercially by the forces of the free market, puritans will cry foul at the crassness of the spectacle. But this is not a matter, primarily, of aesthetics. At the same time, the detractors should note that countries where the national flag has long been an accepted currency of civil passion, have hardly been buried in an avalanche of flag-abuse. The post-September 11 boom in the state of starsand-stripes might have been a dream come true for the shopping malls of America, but it was also a symbol of a

people hanging together in the hour of their greatest grief. Of course, there are those whose will argue that the flag code debate does not go far enough. That, in fact, it's time to go further by questioning the central assumption on which it is premised: The primacy of the European idea of nation-state and its antiquated symbolism. But till such time as we continue to inhabit the fragile nationalist dream, the flag will remain an evocative totem. And, as with America, patriotism will continue to be the preferred refuge of scoundrels, citizens and the marketplace.

- 6. According to the passage, the denial of the people's right to fly the flag on any day was
  - (a) totally justified.
  - (b) without any reason.
  - (c) the violation of fundamental rights.
  - (d) arbitrary and against the spirit of freedom.
  - (e) Totally unjustified.
- 7. According to the passage, carrying and flying the national flag has always been
  - (a) regarded as an act of contempt.
  - (b) viewed as an act of defiance.
  - (c) looked at with suspicion.
  - (d) Derided
  - (e) Both (a) and (b).
- 8. All of the following cannot be inferred from the passage, except:
  - (a) The flag occupies the same place both in democracies and dictatorships.
  - (b) The flag occupies a far more significant place in western democracies than it does in India.
  - (c) The attitude of India towards the flag is in total contrast with the attitude of western democracies towards the flag.
  - (d) Indian bureaucrats are very zealous about the existing rules.
  - (e) The nation-state idea is limited to Europe.
- 9. It can be inferred from the passage that—
  - I. Before the decision of the Union Cabinet, any citizen could fly the national flag, but not without taking permission prior to that from the government.
  - II. It has always been illegal to fly the national flag without taking prior permission from the government.

- III. It has always been the special privilege of the ruling class to fly the national flag.
- (a) Both II and III
- (b) Only II
- (c) Only III
- (d) Both I and III
- (e) All three
- 10. The author's attitude towards the issue can be termed
  - (a) very critical.
  - (b) passionate.
  - (c) indifferent.
  - (d) objective.
  - (e) pecuniary.

Alcohol doesn't often get billed as a brain food, but new research suggests that booze offers at least one cerebral benefit. It may reduce aging drinkers' risk of developing Alzheimer's disease and other forms of dementia.

Although extreme alcohol consumption kills brain cells, there's contradictory evidence about whether long-term drinking has permanent effects on cognitive abilities such as reasoning and memory. Prolonged, excessive drinking can lead to the liver disease cirrhosis and may contribute to breast cancer risk, however. Drinking is also responsible for many accidental injuries and deaths.

Nevertheless, alcohol in moderation promotes cardiovascular health by boosting concentrations of good cholesterol and inhibiting the formation of dangerous blood clots. Additional compounds in red wine seem to benefit the heart and blood vessels. Drinking also appears to guard against macular degeneration, an incurable eye disease.

Now, the brain joins the list of organs that seem to benefit from alcohol.

From 1990 to 1999, Monique M.B. Breteler and her colleagues at the Erasmus Medical Centre in Rotterdam, the Netherlands, observed 5,395 individuals aged 55 and older, who didn't initially show signs of dementia. Of these participants, 1,443 "moderate drinkers" reported having one to three alcohol beverages of some sort each day, while 2,674 said they consumed less than one drink and 165 acknowledged having four or more drinks per day. Another 1,113 participants abstained altogether.

Over an average follow-up period of 6 years, 146 participants developed Alzheimer's disease and another 51 got some other form of age-related dementia. That put the overall risk for dementia at 3.7 per cent. The risk was about 4 per cent among nondrinkers, light drinkers, and heavy drinkers, but only 2.6 per cent of the moderate drinkers developed dementia.

Once the researchers adjusted their data to account for participants' sex, age, weight, blood pressure, use of tobacco, and other factors that influence dementia, moderate drinkers showed only 58 per cent the risk of dementia calculated for nondrinkers, Breteler's team reported.

Moderate drinkers had an even more marked decrease in vascular dementia, a condition in which blockages in blood vessels in the brain cause recurring, minor strokes that gradually erode cognitive ability. The researchers hypothesize that since vascular disorders are linked to dementia in elderly people, alcohol's benefits to blood vessels might indirectly sustain brain function.

Jean-Marc Orgogozo, a neurological epidemiologist at the University of Bordeaux in France hails the study. He and his colleagues have found that French wine drinkers over the age of 65 have a reduced risk of dementia. The new research supports that finding, shows that beer and hard liquor—not just wine—are protective, and establishes the effect in somewhat younger people, he says.

John R. Copeland, a psychiatrist who's retired from the University of Liverpool in England, calls the Dutch finding "very interesting but not unexpected." Although Copeland's research suggested that heavy, long-term drinking reduces cognitive ability in elderly men, people who show benefits in the new study consumed alcohol in more modest, "therapeutic quantities," he says.

However, Orgogozo questions exactly what quantity constitutes a happy-hour medium. His own past research suggests three to four drinks per day are required to help ward off dementia. The lower threshold for benefit in the Dutch study may reflect participants' underreporting of alcohol consumption in a country that, unlike France, attaches a stigma to drinking, Orgogozo says.

- 11. Which of the following can be inferred from the passage?
  - I. Sometimes, alcohol is considered as brain food.
  - II. Alcohol reduces the development of Alzheimer's disease.
  - III. Alcohol may be a cure for dementia.

- (a) Only II and III
- (b) Only III
- (c) Only II
- (d) I only
- (e) None of these
- 12. According to the passage, alcoholism can lead to all of the following except
  - (a) macular degeneration
  - (b) breast cancer
  - (c) death of brain cells
  - (d) cognitive problems
  - (e) liver cirrhosis
- 13. According to the passage, alcohol may have some beneficial effects on all of the following except,
  - (a) brain.
  - (b) liver.
  - (c) eyes.
  - (d) cardiovascular health.
  - (e) None of these.
- 14. The observations of M.B. Breteler do not include which one of the following?
  - (a) Moderate drinking reduces the risks of vascular dementia.
  - (b) Vascular disorders are linked to dementia in elderly people.
  - (c) Alcohol is highly beneficial for brain function.
  - (d) Heavy drinking is advised to reduce the risks of dementia and Alzheimer's disease.
  - (e) All of these observations have been made by Breteler.
- 15. According to the passage, the term "therapeutic quantities" is used to indicate that
  - (a) alcohol acts as a medicine.
  - (b) moderate drinking is advisable.
  - (c) moderate drinking has some medicinal values.
  - (d) small quantities of alcohol is being prescribed as a medicine.
  - (e) moderate drinking is advisable for everyone.
- 16. The attitude of the author towards the benefits of alcohol in reducing the risk of dementia in elderly people can be described as:
  - (a) skeptical.
  - (b) radical.

- (c) positive.
- (d) prejudiced.
- (e) indifferent.

IS there a plant that eats animals? And if I were to eat that plant, will I become a non-vegetarian, albeit once removed? After all, such a plant is technically a non-vegetarian!

This question is not just coffee-table chatter. There are insect eating plants in nature. The Venus fly trap is an oftenquoted example. Now comes the startling information about a member of the pitcher plant family, which has a particular preference for termites, and eats thousands of them at one go. Drs. Marlis and Dennis Merbach and their associates from Germany report on such a plant in the 3rd January issue of Nature.

Our general opinion about plants is that they are truly ascetic, demanding little from other life forms. Much of what they need comes from whatever there is in the ground below, sunlight, some water and air. They make carbohydrates out of this spartan set of ingredients and store them in their bodies. Animals like us pluck these and feed ourselves.

Many of us humans pride ourselves by declaring that we eat nothing but plants, and that we do not eat meat since that amounts to harming animals. The truth is plants are life forms too; furthermore, such interdependence and "big fish eat small fish" is an inescapable part of existence. Wanton hurting of other life forms is what we should not be practising.

The relation between insects and plants has always been intimate and mutually beneficial. Many plants need insects such as bees to help in propagation. For this purpose, they have put out elaborate structures in their flowers, which entice the bee. The colour attracts the insect while the nectar offers a meal. For its part, the insect carries the pollen across to another plant, helping the latter to propagate through such dispersal. In many instances, this mutualism has become so one-to-one as to be finicky or specific. For example, it is a particular legume plant alone that the insect called psyllid (or the jumping plant lice) will go to and none other: an example of "made for each other".

It is all very well, as long as it is the flower and the nectar that the insect is interested in. But if the insect were to start eating any other part of the plant, say the leaf or the seed, it has had it! The plant puts up a strong reaction. Its defence

or self-protection can be pretty offensive. The plant releases chemicals that can stun or even kill the insect. The neem tree is an example. It synthesizes and stores a chemical called azadirachtin. When the insect takes a bite at the plant, the released chemical kills all further desire in the insect to take any more bites. As a result, the insect dies a slow death of starvation. Azadirachtin is therefore called an insect antifeedant. Other plants use other strategies aimed at the same defensive purpose. For example, why are all fruits twofaced? The pulp in them is entirely tasty and nutritious. But the kernel and seed are at best indigestible (they actually can give you a stomach upset), and at worst poisonous (recall the desperate poor tribals of Orissa who suffered eating mango kernels). The pulp is the enticement, the come-hither. The seed should not be destroyed but simply dispersed, so that the next generation plant can grow.

We know that all plants are not passive bystanders in the theatre of life. Several of them are activists that seek out their food and nutrition beyond air, water, soil and sunlight. There is a whole bunch of tropical plants that are carnivorous. Yes, they gobble up insects for food! The Venus Fly Trap mentioned above is the famous one. Its leaf has two lobes, edged with interlocking "teeth". On the surface, they have many trigger hairs. When a hapless insect were to disturb these hairs, the leaf snaps shut. Upon this, the plant secretes some digestive juice into the enclosure, which dissolves much of the insect. The food so mashed up into a puree or soup is absorbed by the plant. The chitinous outer layer of the insect is all that is left, which is discarded later. Here is a twist—the leaf of the plant holds its stomach!

What Dr. Merbach and co-workers found in the Southeast Asian country Brunei was an even more striking example of a non-veg plant. Called "Monkey's Rice Pot" in West Australia, it is technically known as Nepenthes albomarginata. The family Nepenthes has many subspecies. The name is Greek in origin and means banisher of sorrow. One account has it that the plant was used by the ancient Greeks to banish sorrow and induce restful sleep. Obviously, its nectar or some other component has a sedative influence. (Parenthetically, Dr. Dennis Merbach writes to me that he doubts this since not even Alexander the Great came far enough east to find this plant).

The genus Nepenthes is found in Southeast Asia, Seychelles and Madagascar, and Australia, but albomarginata is abundant in Peninsular Malaysia, Sumatra, Borneo and Brunei. The German work was done in Brunei. Albomarginata literally means white border, and is so named because the pitcher that it presents at its leaf tips is rimmed with white hair—like protrusions. It is a slender, heatloving plant that has attractive green-red pitchers rimmed white, and does very well in a stovehouse or heated frames.

N. albomarginata is quite different from its cousins of the pitcher plant genus Nepenthes. Others are not choosy about their prey. They catch any insect that is careless enough to step on their slippery, toothy appendage. Monkey's Rice Pot, or N. albomarginata is picky—it loves to eat termites! In order to do so, it presents its pitcher to the prey, luring them with its colour and distinctive smell. The white hairs that fringe the rim of the pitcher are edible. Termites seem to love the hair and come to it in hordes. The scientists usually found not one or ten, but thousands of termites trapped in a single pitcher!

All the termites they found in one pitcher belonged to the same species and were in the same state of decomposition. This led the researchers to conclude that a whole battalion was caught over a short period of time. The termites caught and gobbled up were largely from no more than three genera, with one particular genus called Hospitalitermes predominating. It thus seems that these fellows are picky about N. albomarginata, and the latter returns the compliment. In fact, the plant pretty much starves when termites are not around. Over the six-month-lifespan of the pitcher, it gets by with a few dozen ants, beetles or flies (while neighbouring pitcher plants of other provenance, not being so picky, get along much better). For its part, the termite genus mentioned above too gets by usually with live fungi and algae, but upon sensing the plant, it forages in massive columns, and meets its death by the thousands at the teeth of the pitcher plant. Extraordinary, till death do them apart!

It is the white hairs that the termites go for. Pitchers with no hair are ignored. When the researchers placed near a termite marching column, both pitchers with hair and pitchers shaven off, the lead termite sensed the white hair, went back and called his mates for the forage. They came in numbers, started gobbling up the edible hairs and making food pellets out of them to carry home. In the process, they fell into the pitcher and could not escape. The fall-in rate was one every three seconds (could be even faster with a bigger marching band). After an hour, when all the hairs were gone, the pitcher was no longer of any interest to the termites. What it is in the hairs that attract the termite is not clear yet. It could be some volatile molecule, but the researchers could not detect any

smell in their study. As of now, it appears that contact happens by chance. To date, N. albomarginata appears to be the only one known plant that offers up its own tissue as bait, and the only one too that specialises on a single prey.

Reading the article, it occurred to me that here is a clean and green way to rid your house of termites—plant a hedge of N. albomarginata around your house, and it will do the rest. Alas, when I raised this point, Dr. Merbach disappointed me with his e-mail message, stating that this group of termites does not feed on wood, since they feed over ground. The wood-eater termites feed underground, while the plant presents its pitchers above. There goes another of my brilliant solutions!

I wonder whether N. albomarginata is seen in India, since there are other members of Nepenthes that grow in our subcontinent. It will also be interesting to check whether some of these are pest-gobblers. One plant, called N. khasiana, is found in the Khasi hills of Assam, but its termitepreference has not been tested so far, to the best of my knowledge. This pitcher plant is an undemanding highland species that grows slowly to a height of about two feet. It is able to tolerate low humidity and temperatures and thus, should be cultivable in other chosen areas of India. And it better be soon, since this plant is already in the endangered list because of encroachment by farmers who have cleared up land in that area for agriculture.

- 17. According to the passage, which of the following is facing the threat of extinction?
  - (a) N. albomarginata.
  - (b) Azadirachtin.
  - (c) N. Khasiana.
  - (d) Hospitalitermes.
  - (e) The pitcher plant.
- 18. According to the passage, where does the digestion in plants take place?
  - (a) stem.
  - (b) leaf.
  - (c) flower.
  - (d) roots.
  - (e) fruits.
- 19. Accordingly to the passage, azadirachtin
  - (a) kills the insect.
  - (b) acts as a poison.
  - (c) acts as a repellant.
  - (d) has the effect of starving the insect to death.
  - (e) induces the death of the insect.

- 20. It can be inferred from the passage that
  - (a) tropical plants are omnivorous.
  - (b) tropical plants are carnivorous.
  - (c) tropical plants depend upon insects for food.
  - (d) some tropical plants absorb the insect soup.
  - (e) Some tropical plants are carnivorous.
- 21. According to the passage, all of the following can be inferred to be not true except:
  - (a) N. albomarginata is completely different from the Nepenthes genus.
  - (b) N. albomarginata is very intelligent.
  - (c) N. albomarginata catches insects inadvertently while others do it in a planned manner.
  - (d) Termites love the hair of the pitcher very much.
  - (e) Plants of the Nepenthes genus eat termites for food.
- 22. According to the passage, Hospitalitermes
  - (a) is a termite genus.
  - (b) is the main food of N. albomarginata.
  - (c) loves to eat the white hairs that fringe the rim of the pitcher.
  - (d) is mainly attracted to the N. albomarginata plant.
  - (e) All of the above.

# Passage 5

Global climate change pundits have for long been blowing hot and cold over melting ice caps, rising ocean levels and unusually hot summers on the one hand and receding deserts, shrinking biodiversity and colder winters on the other. Climatologists are, however, unanimous in their opinion that regional variations notwithstanding, the Earth as a whole is becoming warmer—and largely due to the increased human activity. And yet, as a continent, Antarctica would seem to be bucking the trend. Recent reports quoting American scientists from the South Pole say that while temperatures in every other continent have risen over the past century, Antarctica has become appreciably colder over the past 35 years and continues to cool, becoming the only one of Earth's seven continents to react differently to global warming. The world's average temperature over the last 100 years has risen by 0.06°C a decade, and the average actually went up to 0.19°C between 1979 and 1998. In the Antarctic, on the other hand, temperatures fell on an average by 0.7°C a decade. Traditional theories of climate change have held

that the effects of global warming ought to be magnified at the Poles. Nonetheless, recent research points out that while the Arctic is indeed getting warmer, the Antarctic is definitely getting cooler. This will mean that previous estimates of rising sea levels that included the melting ice caps of both the North and South Poles will have to be suitably revised. So what is the mystery behind the cooling of the White continent?

Since most of the inhabited and industrialised countries are clustered close to the Arctic, polluting emissions waft across to the North Pole, creating a greenhouse effect, warming the air and loosening the ice sheets. Complex interplay of ocean currents appears to have changed temperatures, cooling the southern Ocean around the Antarctic and transforming the Pole's temperature profile. Antarctica's harsh desert valleys are turning cooler, setting off a series of ecological consequences in the region. Meanwhile, here's another contradiction; reports from New Zealand describe how there is a surfeit of global warming—induced break-away icebergs in the Southern Hemisphere.

- 23. According to the passage, all of the following are not true, except:
  - (a) Traditional theories failed to calculate the effects of global warming.
  - (b) Fall in temperatures in the Antarctic is in accordance with the traditional theories.
  - (c) Effect of global warming is the maximum at the Poles.
  - (d) Effect of global warming on Antarctica is on unexpected lines.
  - (e) Effect of global warming on Antarctica is on expected lines.
- 24. According to the passage, it can be said that
  - (a) Antarctica has become colder than the other continents of the world.
  - (b) Antarctica has become colder than the Earth over the last 35 years.
  - (c) The decade growth in temperature is much higher for Antarctica than the Earth itself.
  - (d) The average temperature rise for the decade 1979–1998 was more than the average rise in temperature over the last 100 years.
  - (e) Both the Arctic and Antarctic are getting cooler with global warming.

- 25. It can be inferred from the passage that:
  - (a) Our knowledge and our theories about global climate change fails to explain what is happening across the globe.
  - (b) It is a matter of great contradiction that we failed to understand the full import of global climatic change.
  - (c) We could not understand the importance of global climatic change.
  - (d) It was difficult for us to understand the full implication of global climatic change.
  - (e) The threat of global warming is accentuated due to what is happening in Antarctica.
- 26. According to the passage, factors affecting the temperature profile of Arctic do not include
  - (a) ocean currents.
  - (b) greenhouse effects.
  - (c) atmospheric pollutions.
  - (d) loosening of the ice sheets.
  - (e) Global warming.
- 27. According to the passage, the most important factor for global warming is
  - (a) hot summers.
  - (b) increased human activity.
  - (c) shrinking biodiversity.
  - (d) increasing pollution levels.
  - (e) polluting factories.

### TEST 3

#### Passage 1

"SINCE wars begin in the minds of men," so runs the historic UNESCO Preamble, "It is in the minds of men that the defences of peace must be constructed." Wars erupt out when the minds of men are inflamed, when the human mind is blinded and wounded, succumbs to frustration and self-negation. War is the transference of this self-negation into the other-negation. The three Indo-Pak wars and the persisting will to terrorise have emanated from this savage instinct of other-negation that is the legacy of the partition carnage and its still-bleeding and unhealed wound.

Truncated from its eastern wing in 1971, Pakistan ever since has suffered from a sense of total existential self-negation. Plus the scars left by the two previously lost wars

to India and Kargil fill the Army and the Pakistan psyche with a seething urge to revenge: that India has to be negated, destroyed—in a deep psychological sense, another Hiroshima in the subcontinent is imaginable and possible. Terrorism in Kashmir springs from such deep negating existential grounds. Like the former Soviet Union, Pakistan came into being as a result of a grand delusion and massive perversion of reality—the so called two-nation theory. Like the former Soviet Union, it stands in danger of crumbling unless it modifies its reality perception and comes to terms with its post-Bangladesh identity within the prevailing subcontinental equation. Failing this, Pakistan is bound to break up, nudging the region to a nuclear nightmare, including possible South Asian Hiroshimas.

With 'hot pursuits' and 'surgical operations' freely making rounds among the policy elite and the public at large, the national atmosphere looks ominously charged. "On the brink," headlines The Week (Jan. 6) adding, "As men and machines are quickly positioned by India and Pakistan, the threat of war looms real." To which Gen. Musharraf counters, "If any war is thrust on Pakistan, Pakistan's armed forces and the 140 million people of Pakistan are fully prepared to face all consequences with all their might." According to Indian Express, "Pakistan has deployed medium range ballistic missile batteries (MRBBs) along the Line of Control (LoC) near Jammu and Poonch sectors in an action that will further escalate the tension between the two countries." And India's Defence Minister ups the ante, "We could take a (nuclear) strike, survive and then hit back, Pakistan would be finished." (Hindustan Times, December 30, 2001). Mr. Fernandes's formulation is certainly a tactical super shot, even a strategical super hit inasmuch as this is the very logic of India's 'No-first-strike' doctrine. The Defence Minister obviously has no idea of the ethical, phenomenological implications of abandoning chunks of the Indian population to ransom for potential Hiroshimas and then 'finishing' the neighbouring country of 140 million in what could be nothing short of an Armageddon. Forget these horrendous scenarios. But does this not repudiate the grain of truth for which India's civilisation stood for and vindicated across the untold millennia of its history? Yet, Mr. Fernandes, the pacifist and Gandhian, is no warmonger. As Defence Minister he had to react at a level with the Pakistanis, with their proclivity to drop the nuclear speak whenever that suited them, could have registered the message.

- According to the passage, Pakistan is bound to disintegrate
  - I. and it will throw the subcontinent into a nuclear backlash.
  - II. if it refuses to accept its present identity.
  - III. if it does not stop fuelling terrorism in Kashmir.
  - (a) I, II and III are correct
  - (b) II and III are correct
  - (c) I and II are correct
  - (d) I and III are correct
  - (e) Only I is correct.
- 2. It can be inferred from the passage that
  - (a) Soviet Union also came into being as a result of the two nation theory.
  - (b) Soviet Union crumbled as a result of the grand delusion of the two nation theory.
  - (c) Soviet Union's disintegration was due to her failure to accept the reality.
  - (d) The ideological basis of creation of Soviet Union and Pakistan was the same.
  - (e) Soviet Union came into being as a result of a grand perversion of reality.
- 3. According to the passage, the reason for terrorism in Kashmir is
  - (a) Pakistan's blind faith in terrorism.
  - (b) Pakistan's perception of two-nation theory.
  - (c) Pakistan's sense of self-negation.
  - (d) Both (a) and (c).
  - (e) Pakistan's urge for self destruction.
- 4. According to the passage, all of the following about the defence minister are not true, except:
  - (a) He is not logical.
  - (b) He is not a Gandhian.
  - (c) He is a pacifist.
  - (d) He is not a warmonger.
  - (e) Both c and d.
- 5. "No-first-strike" doctrine suggests that
  - (a) India will never strike with a nuclear weapon
  - (b) India would not initiate a nuclear strike.
  - (c) India will effectively deter a nuclear strike with its nuclear weapons.
  - (d) If Pakistan strikes first, India would finish it.
  - (e) Both b and c.

It is said that the British ruled India with the help of just two laws, the Revenue Recovery Act and Section 144 of the Criminal Procedure Code, whereas the present governments in India, with hundreds of laws on the statute book, are unable to either recover their revenues or control law and order! It is true that the British Government's strength was its unfaltering commitment to the collection of revenues and enforcement of the law. It is not, however, my case that the country should now be run the way it was run by the British or that governments should do nothing but collect revenues and maintain law and order. But does one build a house without any mason to lay the foundation and by concentrating only on plans for interior decoration?

In post-Independence Indian public administration, there has always been a controversy, if not a conflict, relating to the roles of specialists and generalists. The former feel that the latter are cornering jobs for which they are not suitable and the latter feel that the former do not have breadth of perception and are blinkered by their narrow specialist knowledge. The IAS, especially, has been in the eye of this storm, so to say. I have heard my colleagues in functional departments say that the IAS was fit only for collecting revenues and maintaining law and order. The implication was that, apart from being unglamorous and pedestrian, these jobs were only for the unintelligent or the unscrupulous!

In the post-Independence era, the IAS too, presented with opportunities in the economic development sector and with the vanishing of land revenue as an important source of revenue for the States, began to regard tax collection and law and order jobs as not being promising enough from the job satisfaction or career points of view. With greater politicisation of the people and the spread of the populist cult, these activities came to be regarded as not merely nondevelopmental and feudal but almost as anti-people. No wonder that, while premier civil servants distanced themselves more and more from taking them seriously, the politicians seized the opportunity to undermine their importance and effectiveness.

An oversimplified, naïve and misunderstood version of development economics that public finance has nothing in common with private finance and that for a sovereign, especially democratic government, expenditure and income could be independent of each other, has contributed to a dangerously complacent view of poor tax recovery. A government's sovereignty, alas, does not extend to the laws of arithmetic! A divine faith in the seductive comfort of the Laffer Curve and the emerging philosophy of privatisation and liberalisation have made strict enforcement of any rule or law appear not merely rigid and bureaucratic but almost retrograde and reactionary. (At the same time, the government is accused of not enforcing the law strictly against one's competitors!)

Today, immunity from payment and prosecution and the impunity with which both can be evaded—even defied—are the most coveted symbols of political importance, and the prime goal of coming to power is to do this on a scale of everincreasing magnitude and frequency. Immunity from law and impunity of violation have become the modern political equivalents of the ancient sceptre and the crown. Kaleidoscopic coalitions in which the constant goal is to stay in power but the members keep changing almost randomly, have made every politician with at least one other member in his party a potential MLA/MP/Minister! This has made the tax collection and law enforcing agencies diffident and unwilling to stick their necks out. Political scientists who wax eloquent over how the emergence of the concept of coalition is a sign of the maturing of Indian democracy have completely missed, or slurred over, its adverse impact on administration (which includes tax enforcement as well as law and order) and how a coalition is a convenient, indirect and legal way of defection—defecting from principles without defecting from the party!

- 6. According to the passage, it can be said that:
  - (a) British rule in India was very effective in collecting revenues.
  - (b) British rule in India was based on the rule of law.
  - (c) The existing laws are not sufficient for the recovery of revenues.
  - (d) Collection of revenues is of supreme importance for the government.
  - (e) The British were in India only to collect revenues.
- 7. It can be inferred from the passage that:
  - (a) IAS is fit only for collecting revenues and maintaining law and order.
  - (b) IAS is responsible only for collecting revenues and maintaining law and order.
  - (c) IAS is only for unintelligent people.
  - (d) Maintaining law and order and collecting revenues are the responsibilities of IAS.
  - (e) IAS is for the super intelligent.

- 8. According to the passage, emergence of the concept of coalition politics:
  - (a) has allowed and encouraged ideological defection.
  - (b) has made political defection legal.
  - (c) has strengthened Indian democracy.
  - (d) is a sure sign of the maturing of Indian democracy.
  - (e) None of these.
- 9. According to the passage:
  - (a) Public finance has nothing in common with private finance.
  - (b) Sovereign democratic government should keep expenditure and income completely separate.
  - (c) Development economics has not helped to correct the poor-tax recovery system.
  - (d) The spirit of the development economics has not been understood.
  - (e) The spirit of the development economics has been well understood.

Fifty three years since our tricolour fluttered atop Red Fort. Fifty three years of freedom and only a handful of us have succeeded in bagging a Nobel prize. Why has human resource development taken a backseat? Why have we, 1/6<sup>th</sup> of the world's population, done so moderately in the international arena? Questions! Questions! Before we try to seek answers, let us look at ways in which we have stood out in the international arena.

Nobel laureates apart, Time magazine has identified a few Indians amongst 100 heroes and icons of the 20th century. Mother Teresa needs no introduction. J. Krishnamurthy is known for his theological ideas. Gandhi is why we are India. And amongst these personalities is a person who has put the Indian system of healing on the global map. Deepak Chopra, "Lord of immortality", the new age guru and an endocrinologist by training is the poet-prophet of alternative medicine.

The ancient view of medicine was essentially a holistic one, i.e., an intimate interaction of body, mind, environment and spirit. The human being and the whole of society and nature for that matter, was viewed as being intelligent, conscious and ordered. Nature had laws and in order to stay well or to treat illness, one had to work with those laws. The physical world was believed to be underpinned by the mental world—by the spiritual. As these 'worlds,' move 'inwards' they become more subtle and difficult to measure. A lot of work has nevertheless gone into developing measurement tools for physical and psychological parameters and through their combination, we are able to test if such relationships exist. This field of study is called mind-body medicine, probably the most comprehensive and reliable scientific examination of holism. Mind-body medicine focuses on the interactions between mind and body and the powerful ways in which emotional, mental, social and spiritual factors can directly affect health. It regards as fundamental, an approach which respects and enhances each person's capacity for selfknowledge, self-care and emphasizes techniques which are grounded in this approach. These techniques include selfawareness, relaxation, meditation, exercise, diet, biofeedback, visual imagery, self-hypnosis and group support. It explores and integrates the healing practices of other cultures, such as acupuncture and accupressure, meditation and yoga, as well as alternative Western approaches, including herbalism, massages, musculoskeletal manipulation and prayer. It views illness as an opportunity for personal growth and transformation and health care providers as catalysts and guides in this process. Consciousness, being primary, illuminates thoughts, desires and emotions in the mind and these in turn affect behaviour and physiology. Consciousness gives life to mind and body.

Over recent times, there has been an explosion of knowledge in the physical sciences. In medicine, the emphasis has tended to focus on the human body, but it has often ignored a holistic perspective, that is the body's interaction with mind, emotions, social environment and spirit. This more mechanistic and materialistic way of viewing the human being and illness has often times been at the expense of more traditional holistic models, which placed great emphasis on these more subtle elements of human experience. Mindbody medicine and its kindred fields of study, such as psycho-neuro-immunology and psychooncology, are opening our awareness and require more communication and cooperation across the scientific community than ever before. Thus far we can say that the potential of mind-body medicine for promoting health, both physically and psychologically, seems to be great. Its costs are relatively low and the 'side-effects' seem to be generally low. It may well be that the next major break-throughs in clinical medicine will involve the re-integration of contemporary physical sciences with traditional wisdom.

- 10. Which of the following is not a characteristic of mind-body medicine?
  - (a) It is a field that has been developed by Deepak Chopra.
  - (b) Deepak Chopra is the only proponent of mind-body medicine.
  - (c) It emerges out of the ancient view of medicine as a holistic one.
  - (d) It focuses on the interactions between mind and body and how social, mental, emotional and spiritual factors affect health.
  - (e) None of these.
- 11. According to the passage, which of the following is/are vital for the mind?
  - I. Illuminations
  - II. Visual imagery
  - III. Meditation
  - (a) II and III
  - (b) Only I
  - (c) Both I and II
  - (d) Only II
  - (e) Only III
- 12. It can be inferred from the given passage, that:
  - (a) modern medicine totally rejects the need of harmonizing the human body interaction with the human mind.
  - (b) Modern medicine does not accept the traditional holistic models.
  - (c) Modern Medicine is more mechanistic and materialistic in its approach than that of the traditional holistic models.
  - (d) Traditional holistic models attach greater importance to mind, emotions, social environment and spirituality.
  - (e) Modern medicine is superior to traditional holistic models.
- According to the passage, mind-body medicine is the most comprehensive and scientific examination of holism because
  - I. It developed measurement tools for physical and psychological parameters.
  - II. It tests the relationships between physical and psychological parameters.
  - III. In it, the physical world, the mental world and the spiritual world move inwards to become one.

- (a) Only III is correct
- (b) Only I and II are correct
- (c) I, II and III are correct
- (d) Only I and III are correct.
- (e) None of these
- 14. Which of the following professions is the most likely one to which the author could belong?
  - (a) a psychologist
  - (b) a physician
  - (c) a sociologist
  - (d) an economist
  - (e) a scientist
- 15. According to the passage, consciousness does not affect
  - I. thoughts, desires and emotions.
  - II. behavior and physiology.
  - III. mind and body.
  - (a) II and III only
  - (b) III only
  - (c) I and II only
  - (d) Only I
  - (e) None of these

Treatments for heart failure—implantable heart devices and cell-grown tissues—are among the top 10 research advances in heart disease and stroke for 2001, says David Faxon, president of the American Heart Association.

Other major milestones include drug-eluting stents and the use of stem cell transplants to repair stroke-damaged brains. Created in 1996, the 'Top 10' list highlights major gains in heart disease and stroke research.

In what could become one of the biggest breakthroughs in treating cardiovascular disease, scientists used drugcoated stents to prevent the reblockage of the stented section of a coronary artery.

Reblockage occurs in about 15 per cent to 30 per cent of angioplasty patients who receive stents. Researchers involved in several clinical trials have found that stents coated with a drug prevent the overgrowth of cells that typically causes the stented artery to reblock. A number of other drug-eluting stent trials are under way.

Heart failure patients treated with a left ventricular assist device (LVAD) lived longer and better than patients who did not receive the device.

Surgeons implanted the pump, which is the size of a compact disc player, into the upper part of the abdominal wall or in the peritoneal lining. A tube on the device enters the left ventricle and drains blood from the ventricle into the device.

The pump sends the blood to the aorta. Another tube attached to the pump extends outside the body and is attached to a videotape-sized battery pack, which is worn on a shoulder holster. Patients wear a beeper-sized control system on a belt.

The device assists the heart's left ventricle, which becomes weakened in heart failure. The LVAD lets blood pass from the left ventricle to the aorta, which supplies oxygenrich blood to the brain and the rest of the body.

On July 2, 2001, 59-year-old Robert Tools became the first person to receive the AbioCor implantable heart. He lived for 151 days.

To be accepted, patients must have severe heart failure, affecting both the left and right ventricles of the heart and have a life expectancy of no more than 30 days. The heart is implanted in the chest and mimics the function of the human heart by circulating blood through the body. It is batteryoperated and weighs only about 2 pounds.

Cardiovascular surgery requires replacement parts such as heart valves, blood vessels and vascular patches, but their function may be complicated by blood clots, tissue overgrowth, limited durability, infection and the inability to grow. The body can reject donor tissue. Tissue engineering using a patient's own blood or cells offers an alternative source. It holds particular promise in pediatric surgery where a graft with growth potential is important.

Researchers at the University Hospital Zurich in Switzerland used human bone marrow cells as a new cell type to engineer heart valves in the laboratory. The researchers concluded that human umbilical cord blood is a valuable source of EPCs, providing novel cells for tissue engineering.

The exciting possibilities for this cell source include "banking" the cells for future use. Cord blood cells could potentially be used to create a tissue-engineered structure needed to correct a cardiac birth defect diagnosed prenatally.

In other cell transplant experiments, adult human cardiac myocytes (heart muscle cells) regenerated after heart attack.

This means the heart may be able to replace damaged tissue by producing new functional cells. In a similar research, adult stem cells derived from bone marrow regenerated, forming new functional heart cells when injected around the site of the heart attack.

Experimental treatments using genes for vascular endothelial growth factor (VEGF) are not new. But in 2002, researchers brought a new twist to this pioneering treatment for coronary artery disease.

For the first time, researchers proved that blood flow to the heart improves after VEGF treatment. VEGF is a naturally occurring protein that stimulates the proliferation and migration of endothelial cells and endothelial progenitor cells, leading to the formation of new blood vessels.

The theory is that injecting the gene into the heart triggers the growth of new blood vessels in the oxygen-starved heart muscle.

The MRC/BHF Heart Protection Study (HPS) is the world's largest randomised trial of cholesterol-lowering drugs and of antioxidant vitamins in people at increased risk of coronary heart disease (CHD). Even though they have been used for decades, statin drugs' usefulness in particular populations is unknown.

Cholesterol-lowering therapy reduced total and vascular mortality, total CHD, stroke, and revascularisation procedures. Simvastatin given at 40 mg daily reduced 'major vascular events' by at least one-third among patients. Further development in treating lipid disorders is to match the intensity of the therapy to the person's risk.

Primary prevention of cardiovascular disease should begin with reducing intakes of saturated fat, increased physical activity and weight control. Secondary prevention should include reducing LDL cholesterol below 100 mg/dL by lifestyle changes and drug therapy.

In one of the largest genetic studies of its kind, researchers discovered three genetic variants that may explain why some families are prone to premature heart disease. The culprit genes regulate thrombospondins (TSP).

The investigators discovered distinctive variations in the genes of families with coronary artery disease, including a protective one. Changes known as single-nucleotide polymorphisms (SNP) were observed in genes that encode different thrombospondin proteins. These proteins govern new blood vessel growth, blood clotting and the blood vessel response to oxidised low-density lipoprotein cholesterol (LDL).

Mutations in another gene called LMNA cause a disease called Dunnigan-type familial lipodystropy, in which carriers have a six-fold increased risk of coronary artery disease.

Because the mutant gene was also linked with insulin resistance, type 2 diabetes, lipid problems and hypertension, this research may help improve the understanding of major coronary heart disease risk factors.

A third gene for Familial Wolff-Parkinson-White Syndrome was identified by researchers. The syndrome is the second most common cause of paroxysmal supraventricular tachycardia (irregular heartbeat).

Rat stem cells developed into neurons and other mature brain tissue when transplanted into normal and strokedamaged adult rats. This suggests the possibility that brains and spinal cords can be repaired following trauma from stroke or other diseases.

Researchers harvested embryonic cortical cells (which come from the cerebral cortex—the outer layer of the brain) for the transplants.

The cerebral cortex is the mantle of gray substance covering each half of the brain. It's responsible for higher mental functions such as thought, memory and voluntary movement. This is the area most often damaged by strokes. Cortical stem cells were injected into the brains of normal adult rats and adult rats damaged by stroke.

The stem cells grew in the damaged area, forming connections with neighboring cells. At 21 to 45 days after the transplants, most stem cells grew into mature neurons and other mature brain cells.

In another milestone in stroke research at the animal level. intravenous administration of bone marrow cells reduced stroke-induced disability. Another study showed that intravenous treatment with adult donor rat stromal cells (mature cells from bone marrow) allowed the rats to return to normal or near-normal function within 14 days of a stroke.

This may provide new treatments in the future for stroke, brain trauma and spinal cord injury in humans.

It may also be useful in treating Parkinson's disease, multiple sclerosis, Alzheimer's and other neurological diseases.

Behaviour, rather than genetics, may provide the key to reducing a woman's risk of developing type 2 diabetes.

Results suggest that the majority—an estimated nine out of 10 cases—of type 2 diabetes could be prevented by weight loss, regular physical activity, healthy diet, abstinence from smoking, and moderate consumption of alcohol (half to one drink per day for women).

Excess body fat was the single most important risk factor in the development of type 2 diabetes.

Lack of physical activity was also a significant risk, independent of body weight.

Conversely, women who exercised seven or more hours weekly cut their risk by 50 per cent compared with sedentary women.

The women at lowest risk ate a diet high in cereal fibre and polyunsaturated fats, and low in saturated and trans fat. They abstained from smoking and drank moderately.

Secondhand smoke damages the inner layer of the blood vessels, the endothelium, providing the first direct evidence of passive smoking's link to heart disease.

Although passive smoking did not reduce active smokers' coronary flow velocity during hyperemia, it was reduced significantly in nonsmokers.

Researchers add that this finding provides us with enough evidence of a direct effect of passive smoking on the coronary circulation in non-smokers.

It is also said that passive smoking affects flow reserve in nonsmokers more than in active smokers.

- 16. According to the passage, the implantable heart
  - (a) is a carbon-copy of the human-heart.
  - (b) functions like a human heart.
  - (c) can also work without the help of a battery.
  - (d) is made up of carbon.
  - (e) is an utter failure.
- 17. According to the passage, which one of the following is responsible for blood-clotting?
  - (a) single-nucleotide polymorphism.
  - (b) HDL.
  - (c) thrombospondin.
  - (d) insulin resistance.
  - (e) LDL.
- 18. According to the passage, which of the following supplies oxygenated blood to the brain?
  - I. Left Ventricle.
  - II. Aorta.
  - III. Left Ventricle Assist Device.
  - (a) Only I
  - (b) Both I and II
  - (c) Only II
  - (d) I, II and III
  - (e) Only III.
- 19. According to the passage, cardiovascular surgery does not involve
  - (a) replacement and transfusion of blood.

- (b) replacement of blood vessels.
- (c) replacement of heart valves.
- (d) removal of blood clots.
- (e) replacement of vascular patches.
- 20. According to the passage, the term "myocytes" stands for
  - (a) heart-function.
  - (b) heart-muscle cells.
  - (c) the human heart.
  - (d) any animal heart.
  - (e) heart vascular patches.
- 21. According to the passage, the main focus of the HPS is
  - (a) on prevention therapy
  - (b) on the benefits of cholesterol-lowering drugs
  - (c) on random-trial
  - (d) on the benefits of the anti-oxidant vitamins in CHD.
  - (e) on randomised trials of cholesterd lowering drugs.

Mobility of capital has given an unprecedented leverage to companies not only to seek low paid, informal wage employees across national boundaries, but the threat of capital flight can also serve to drive down wages and place large numbers of workers in insecure, irregular employment. Informalisation strategies enable employers to draw on the existing pool of labour as and when they require, without having to make a commitment to provide permanent employment or any of the employee-supporting benefits associated with permanent jobs.

As far as the working class is concerned, informalisation is in fact, a double-edged sword. For not only is the employee denied the rights associated with permanent employment, but the nature of casual work essentially destroys the foundations of working class organisation. As workmen move from one employer to another, numbers are scattered, everyday interests become divergent, and individualised survival takes precedence over group or collective struggles.

Even workers who have been in sectors with a long tradition of unionisation are difficult to organise once they are removed from the arena of permanent employment. About 50,000 textile mill workers in Ahmedabad City were laid off during the late 1980s and early 1990s. The move to obtain

compensation and rehabilitation for these workers floundered on the weakness of the struggle, as numbers of workers who were available for pressing their claims and taking to some kind of activism dwindled, the motivation of leaders declined and the struggle slowly frittered away. If this is the situation with workers familiar with the concept of unionisation, the task of organising vast masses of casual workers who have never been organized, is obviously much more difficult. The problem, essentially, is not only that of organising workers for struggle, but given the transitory nature of casual employment, employers are not bound to provide insurance of any kind, and frequently, there is no fixed employer against whom workers' claims can be pressed.

In this context, the formation of the National Centre for Labour (NCL) can be seen as a landmark in the history of the working class movement in India. The NCL is an apex body of independent trade unions working in the unorganised sector of labour, registered under the Indian Trade Union Act, 1926. Through its constituent members, the NCL represents the interests of workers in construction, agriculture, fisheries, forests, marble and granite manufacturing, selfemployed women, contract workers, anganwadi and domestic workers, as also workers in the tiny and small-scale industries. The NCL, launched in 1995, has about 6,25,000 members spread over 10 states in India.

The NCL reflects two tendencies. First, the formation of such a federation highlights that despite the problems in organising workers in the informal sector, there have in fact, been a range of organisations which have sought to address these issues. On a collective plane, their activities represent a marked departure from the traditional way of conceptualising union activities exclusively around organised or formal sector workers. Thus, the unionisation of the hitherto unorganised sector has become inserted into the political universe as a possible and legitimate activity. Second, the formation of the NCL, to an extent, overturns the pessimistic logic that the interests of the unorganised sector—given their diverse and inchoate form—cannot be articulated from a single platform. For the NCL aims precisely, to not only provide an anchoring for these diverse organisations, but more importantly, to articulate the need for institutionalised norms of welfare which can apply to the unorganised sector as a whole.

It is in the context of this generalised movement that one needs to view recent efforts to bring in legislative acts which seek to create a new framework of laws and institutions

addressing the needs of the unorganised sector. One of the major problems that has dogged this sector has of course been that of implementation. Thus, for example, while there is a stipulated minimum wage for most industries, this is frequently flouted by employers. A central objective of the NCL has been to advocate legislation to create agencies, which would mediate between the employer and the employee, to institutionalise certain guarantees of welfare and security to the employee. Thus, for example, the State Assisted Scheme of Provident Fund for Unorganised Workers, 2000, proposed by the Labour Department of the Government of West Bengal, introduces the mechanism of a Fund which will be contributed to by the worker ( wage-earner or selfemployed person), the employer, and the Government and to which the worker would be entitled at the age of 55 or above. By registering a worker to this programme and issuing an identity card, the initial hurdle of identifying a large mass of scattered workers is overcome, and a step is taken towards institutionalising their legitimate claims against the employers and from the State.

The Karnataka Unorganised Workers (Regulation of Employment and Conditions of Work) Bill, 2001, offers a more comprehensive framework for addressing the unorganised sector's needs. It envisages the formation of a Fund and a Board, in each sector. The Board, consisting of members from the Government, employers and employees, would be responsible for administering the Fund. Employers must compulsorily pay towards the Fund, a certain fixed percentage of the wages or taxes payable by them, or a certain percentage of the cost of their project, (for example, in construction projects). The concept of the Fund is designed to create the financial viability of social security for workers, and to provide a structure for employers' contribution. Thus, workers would be insured for accident and illness, old age, and unemployment. The Board is designed to provide a mechanism to ensure the working of the Fund, and essentially, to institutionalise workers' claims against employers through an empowered agency.

In the broader context of economic liberalisation, recently proposed labour reforms seek to extend the scope of contract employment and to facilitate worker lay-off. As casualisation of labour now seems an irreversible trend, the Bills outlined above would appear to be the only way to insure workers' interests. To this extent, organisations such as the NCL, which have systematically struggled to push for such legislation, are serving an invaluable historical purpose. As the Karnataka Unorganised Workers Bill awaits endorsement

during the Assembly sessions being held currently, for the protagonists of the movement, this would be a watershed, but, nevertheless, only a moment in a struggle that needs to be waged at multiple points and to evolve to newer heights.

- 22. According to the passage, the proposed labour reforms
  - (a) will encourage the practice of hiring Labourers on a contract basis.
  - (b) will provide a much needed thrust to liberalization.
  - (c) have resulted in casualisation of labour.
  - (d) seek to extend the scope of employment and to facilitate worker retrenchment.
  - (e) will help labourers.
- 23. According to the passage, textile mill workers could not obtain compensation because
  - (b) they were not united.
  - (a) the number of workers available for pressing their claims was not adequate.
  - (c) of the weakness of the struggle.
  - (d) the motivation of the leaders was very low.
  - (e) None of these.
- 24. According to the passage, the most important aspect of the NCL is that
  - (a) it is an apex body of independent trade unions.
  - (b) it has given a voice to the interests of workers in the unorganized sector.
  - (c) it has 6,25,000 members spread over 10 States in India.
  - (d) it is the only body of its kind in India.
  - (e) It brings togerther various organised and unorganised sectors.
- 25. The tone of the passage can be best described as
  - (a) very critical.
  - (b) descriptive.
  - (c) analytical.
  - (d) exploratory.
  - (e) Arbitrary.
- 26. It can be inferred from the passage that
  - (a) Informalisation of labour is the result of industrial unemployment.
  - (b) Informalisation attaches little importance to making a commitment towards providing permanent employment.

- (c) Informalisation of labour and economic liberalization in India are closely interrelated
- (d) Both (b) and (c.)
- (e) None of these.

#### TEST 4

## Passage 1

THE murder of Fadime Sahindal, a young Kurdish woman, in the Swedish university city of Uppsala was no ordinary affair. Her father shot her in the head, in front of her mother and younger sister, for refusing an arranged marriage with a stranger from her Turkish homeland.

The killing has stunned Swedes. Thousands have joined torchlight vigils in her memory. Thousands more are expected to attend her funeral in Uppsala's Lutheran cathedral. Miss Sahindal was an outspoken champion for second-generation immigrants seeking their own way of life, often against their more tradition-minded parents' wishes. Mona Sahlin, Sweden's immigration minister, called her "a fantastic role model for young women".

The murder has also touched a raw nerve in Sweden by questioning the country's ability to integrate its ethnic minorities. Issues such as forced or arranged marriages and the clash between Swedish values and those of immigrants have leapt up the political agenda. The problem is not just Swedish. Denmark too worries about integration, and a row about arranged marriages is now blazing there.

But the two governments have taken different approaches. After Miss Sahindal's death, Sweden's ruling Social Democrats said they would give more cash to crisis centres and support groups for young women seeking to avoid arranged marriages or to leave violent partners. They also said they would close a legal loophole that lets foreign girls as young as 15 to marry, when 18 is the threshold for everyone else. The tone of Swedish ministers was one of sympathy for victims of forced marriages.

Not so in Denmark. Foreigners—or at least immigrants plus their descendants for a couple of generations, make up about 7 per cent of the population. No vast figure, and foreign need not mean brown or black. But the new centreright coalition was helped to power in November by a promise to curb immigration, and at times, will need votes in parliament from the overtly anti-immigrant People's Party, which made large gains. The government has chosen to take action at the border. Till now, the foreign spouse of a Danish resident was entitled, automatically, to come in with a residence permit. But under proposals unveiled last month, this—with some exceptions, maybe—would no longer be true, even for Danish citizens, if either person was aged less than 24 (unless, of course, the incomer was a Dane or other EU citizen). Even for a couple both aged 24 or more, the permit would not be automatic; cases would be decided individually.

The Danes are also making it harder for foreigners to come to Denmark to join family members already there. The reason, they say, is that unemployment among young immigrants is already too high. Human-rights campaigners suspect grubbier motives: to keep Denmark's proportion of brown and black residents below 10 per cent.

- 1. According to the passage, the murder of Sahindal reflects that
  - (a) Turks are generally orthodox.
  - (b) Kurdish are generally orthodox.
  - (c) Turks are opposed to arranged marriages.
  - (d) Kurds are opposed to arranged marriages.
  - (e) Kurds are unorthodox people.
- 2. According to the passage, the murder of Sahindal raises all of the following issues except:
  - (a) arranged marriages.
  - (b) clash of Swedish and immigrant values.
  - (c) Sweden's ability to integrate its ethnic minority.
  - (d) Denmark's ability to integrate its ethnic minority.
  - (e) None of these.
- 3. According to the passage, a large number of Swedes joined torchlight vigils to
  - (a) express solidarity with the cause for which Sahindal was murdered.
  - (b) express resentment against the murder.
  - (c) show displeasure against the murder.
  - (d) console the family.
  - (e) express solidarity with the family.
- 4. According to the passage, the Swedish government is planning to
  - (a) implement an exhaustive and extensive social reform program in Sweden.
  - (b) give cash awards to young women seeking to avoid arranged marriages.
  - (c) punish orthodox Kurdish population.
  - (d) Implement policies to support victims of forced marriages.
  - (e) None of these.

- 5. According to the passage, all of the following are not true, except.
  - (a) Denmark and Sweden both are facing the problem of integration of ethnic minority.
  - (b) Denmark and Sweden are planning to work together to tackle the same problem.
  - (c) Denmark has refused to work together with Sweden
  - (d) The problem of ethnic minority is not a big issue in Denmark.
  - (e) All the above are not true.
- 6. The author of the passage could be
  - (a) a political scientist.
  - (b) a social scientist.
  - (c) an immigrant.
  - (d) a psychologist.
  - (e) a politician.

The year was 1965. I was deputy secretary (budget and planning) in the ministry of defence. In 1963, a top secret committee headed by JRD Tata had been appointed to review the decision to produce the Russian MiG-21 aircraft in India. At that time, there were hopes that the US would agree to license their F-104 fighter aircraft for production in India.

Although these had been supplied to Pakistan, New Delhi and Washington had developed a military aid relationship after the Chinese attack in October 1962.

The sum and substance of the Tata committee report was that India should opt for the US aircraft and scrap the MiG project. However, when defence minister Y B Chavan led a delegation to the US in May 1964 to sign a comprehensive aid agreement, it became clear that US would not release the F-104 aircraft for India. Instead, the US offered the F-5 aircraft which the US air force itself did not have in service. After his return from the US, Chavan went to Moscow in August 1964. At the end of the visit, Chavan not only reconfirmed the earlier MiG-21 production agreement but also placed orders for three extra squadrons.

In 1965, the Public Accounts Committee under the chairmanship of R R Morarka, demanded to see the Tata committee report. As was to be expected, the ministry of defence took the stand that the top secret report could not be shared with the PAC. Since, as deputy secretary, I was the coordinator for dealings with the PAC at my level, the file

came to me. I put forward a solution which earned me the distinction of being dubbed a maverick.

I argued that while it may not be possible to share the top secret report with the entire PAC and allow it to be discussed, the PAC chairman's status was equivalent to that of a cabinet minister; one day, he could become a Union minister. Therefore, it would be quite in order for the defence minister to invite the PAC chairman to his office, give the report to him, get him to read it and then discuss with him how he would like it to be handled. This suggestion of mine was forwarded to Chavan by the joint secretary, albeit with a lot of reservations.

The defence minister accepted my suggestion. He invited Morarka to his room and gave him the slim Tata committee report to read. Morarka read it and he did not press the matter any further. At that time, the Congress party had been in power continuously for 18 years and no opposition had ever tasted office at the Centre.

Some 37 years later, the situation is different. The opposition parties have also been at the helm of the Union government. The present chairman of the PAC has had a long innings as a cabinet minister. Once again, the same kind of issue has arisen with the PAC asking for the CVC's top secret report on defence deals. Is Chavan's democratic norm still relevant?

- 7. According to the passage, Tata Committee was constituted
  - I. to make a case for the licensed production of F-104 fighter aircraft.
  - II. to help the government in taking a decision about the production of MIG-21 in India.
  - III. to suggest to the government how to cancel the proposed plan of production of MIG 21 in India.
  - (a) I and III only
  - (b) I and II only
  - (c) II and III only
  - (d) All three
  - (e) I only
- 8. According to the passage,
  - (a) The author was of the opinion that the Tata committee report was a top secret report and it was not in national interest to discuss it in PAC.
  - (b) The author was of the opinion that the Tata committee report may be discussed with the PAC chairman in extraordinary circumstances.

- (c) The author was of the opinion that it should be left on the wisdom of the PAC chairman how he would like it to be handled.
- (d) Both (b) and (c).
- (e) All of a, b and c.
- 9. It can be inferred from the passage that
  - (a) US was never interested in selling F-104 aircraft.
  - (b) US was never in agreement with India to supply F-104 aircraft.
  - (c) US breached the agreement with India.
  - (d) India breached the agreement with US.
  - (e) There was a mutual breach of agreement between India and US.
- 10. It can be inferred from the passage that the author thinks that
  - (a) the CVC's top secret report should be discussed in PAC.
  - (b) the CVC's top secret report should not be discussed in PAC.
  - (c) there is a need for flexibility on the part of the government while dealing with sensitive reports.
  - (d) Both (a) and (c).
  - (e) None of these can be inferred.
- 11. The attitude of the author towards the issue can be best described as
  - (a) anarchist.
  - (b) democratic.
  - (c) autocratic.
  - (d) moderate.
  - (e) logical.

Unmindful of relentless criticism from the global anti-GMO lobby, China is forging ahead with biotechnology-enhanced agriculture, reaping huge benefits in the process.

An article in Science magazine's recent issue claims that Chinese farmers are the greatest beneficiaries from Bt cotton's reduced pesticide need, through vast reduction in costs and increased production efficiency. A US-China joint scientific study report released last year says "It (Bt cotton) has resulted in substantial economic benefits for (China's) small farms".

The report also takes note of criticism which says that GM crops are bad for consumer health, and could impoverish

small farmers, fatten the profits of MNCs like Monsanto and increase pesticide use and reduce biodiversity. But, points out the report, agro-BT has the power "to help solve the problems of hunger and excessive pesticide use" and that this is abundantly evident in the Chinese example.

The truth probably lies somewhere in-between. China introduced GM (genetically modified) cotton on a large scale in 1996, after conducting a few field trials and relying heavily on US-generated test-data. Bt cotton is engineered to thwart the cotton pest, bollworm, that has for years decimated crops in the developing world, particularly in India and China.

Bt cotton produces Bacillus thuringiensis (Bt) which repels the bollworm pest. That China has stolen a march over us is evident even in Kathmandu markets where Chinese cotton is fast edging out other players. Is India missing the cotton bus? China could well become a leading cotton growing country, going by the spectacular results reportedly achieved in production volume, economic benefits and export performance.

Sceptics point out that China has already invested hugely in the new technology—Bt cotton in China is the world's most widespread transgenic crop programme for small farmers, with over 700,000 hectares under cultivation—and so, it cannot now afford to paint a blurred picture. That's why, they say, China is trumpeting its achievements—about how Bt cotton has worked wonders for the poor farmer, boosting income levels and increasing productivity.

Even discounting such pessimism, the plain truth is that we're still grappling with a strong anti-GMO activist lobby and frightened farmers who view the new technology with suspicion. So how did China take this great leap forward?

For one, China hasn't experienced the violent public opposition we've sampled here: three years ago, the Mahyco-Monsanto cotton trial fields in Karnataka were torched by irate mobs. Secondly, China doesn't have to contend with official bottlenecks of the kind Indian farmers face. Bt cotton grown in 11,000 hectares in Gujarat was recently withdrawn from the market as the seed company had failed to get clearance from the GEAC (Genetic Engineering Approval Committee), a Central government body set up to regulate the introduction of BT in agriculture.

Government-sponsored field trials of GM cotton have been on for nearly five years now; the results gleaned ought to have been made public. Because, it is only after Bt cotton is cleared for commercial cultivation that we can even hope to catch up with China. Moreover, unlike GM food crops, cotton is not used for human consumption. We really don't have much choice today, between pest-induced cotton crop failure causing farmers' suicides and boosting cotton production through using Bt cotton.

- 12. According to the passage, Bt cotton
  - (a) could impoverish small farmers.
  - (b) could increase pesticide need.
  - (c) has been proved economically beneficial for small farmers.
  - (d) has resulted in a vast increase in production in the case of China.
  - (e) Is not suited for Indain conditions.
- 13. According to the passage, the most important objective of introducing GM cotton is to
  - (a) produce Bt.
  - (b) fight a special pest.
  - (c) produce bollworm and increase productivity.
  - (d) reduce pesticide use.
  - (e) reduce cost and increase productivity.
- 14. According to the passage, India is way behind China in Bt cotton production because
  - (a) Indian conditions are not conducive for it.
  - (b) India could not get the US-help.
  - (c) Indian public opinion is hostile toward it.
  - (d) Indian government is not proactive in implementing it.
  - (e) Both (c) and (d).
- 15. According to the passage, the attitude of the author towards the introduction of Bt-cotton in India is
  - (a) skeptical.
  - (b) radical.
  - (c) rational.
  - (d) not flexible.
  - (e) hopeful.
- 16. According to the passage, it can be inferred that Chinese transgenic crop program has become a success because
  - (I) China is not a democracy.
  - (II) China invested hugely in the new technology.
  - (III) China pursued the implementation of the program single-mindedly.
  - (a) I and III only
  - (b) III only

- (c) I and II only
- (d) II and III only
- (e) All three.

## Passage 4

The more things change, as the saying goes, the more they stay the same. That could be the depressing epitaph on an eventful year. How else could one explain the extraordinary capacity just revealed in the most powerful country in the world, and now even in our own country, for the most basic and antediluvian of appetites—the lust for war?

It is difficult today to pick up a newspaper or experience the images and comments from major news channels without a deep sense not just of fear for the future, but of shame and embarrassment. We have the mainstream media bombarding us with the most hawkish and aggressive posturing from our own countrymen (yes, they are almost always men) and then eagerly repeating every equally inane and ridiculously belligerent response of the so-called "enemy". We have declarations of hate and threats of violence which are covered in so much self-righteousness and pious wrath that they threaten to go up in smoke themselves. And through sheer repetition, we the recipients of this onslaught of outrage, are—frighteningly—getting more used to the idea of war, to the notion that it is in some way necessary or inevitable.

It is well known that periods of war, or war mongering, are associated with and depend upon temporary cessations of sanity in society at large. Even so, some of the current discourse is so ludicrous as to be startling. Take, for example, the notions that terrorism can be fought and defeated through war, or that raining bombs upon a country composed of predominantly innocent people can prevent handfuls of desperate and maddened people anywhere in the world from engaging in violence upon other innocents.

Surely no one in her sane mind could really believe this, even if CNN tells us that George Bush thinks so. But such are our dark times that we in India seem not only to have fallen for that quite remarkable formula, but even adopted it for our own. And we—or at least much of our media—appear to have decided that the only means to combat private terror is by unleashing state terror of even greater and more damaging proportions, destroying our own civil liberties and putting many more lives in our subcontinent at risk.

Of course, there are many contradictions in this belligerent position. In fact, if it were not so awful, it would even be funny. Think for example, of the attitude that so much of our mainstream and largely middle class media has towards politicians and elected representatives of our people, who are routinely reviled as being the most corrupt, unmindful, irresponsible, generally useless and even most objectionable, of all Indian elites. If they are indeed such a bad bunch, then why on earth are the same media getting so excited about the same politicians being attacked in Parliament?

Think, again, of the kind of people who are most anxious for aggressive and forceful state intervention in military form. They are mostly the very same people who are libertarian in the extreme when it comes to state intervention in the economy, wanting the state to retreat from practically all areas and renege on most basic responsibilities to its own citizens in the form of ensuring minimal socio-economic rights. But then, may be it is not such a surprise after all, throughout history, and especially under late capitalism, the number of jails and policemen has increased proportionately, even as public provision of basic needs has decreased.

Think, then, of the basic contradiction of the macho warmonger in India: that finally, both the decision to go to war or the decision to cool off must depend upon a nod from Uncle Sam. It is interesting that mostly this is not a source of discomfiture but a matter of pride. In a sense, that may even be a reflection of the peculiar form of jingoism that has been emerging among a section of metropolitan and nonresident Indians: a chauvinism that glories not only in an imagined heritage but in proximity to the world's big shot, in both material and political terms. This is far removed from genuine patriotism that is concerned with the welfare of most Indians, but it surely commands a lot of newspaper space and television airtime.

The most appalling contradiction of all is also the least funny. If the mainstream media were to provide any indication, the enormous economic problems of India—the huge wasteful food grain stocks, the problems faced by growing numbers of cultivators driven to suicide, the collapse of small industry, the desperate lack of jobs across the country simply disappeared on September 11. And after December 13, of course, the only domestic issue of concern has been terrorism and how to control it by bashing Pakistan.

The problem is not only that this may even lead us to an unbelievably dangerous war with very uncertain outcomes. It is also that, even if we manage to avoid that depressing fate, we will have diverted our minds, energies and resources from other crucial problems and squandered a real opportunity for change.

- 17. According to the passage, the author
  - (a) seems to be in total conformity with the concept that terrorism can be defeated through war.
  - (b) does not think that terrorism cannot be defeated through war.
  - (c) is of the opinion that it is not realistic to believe that terrorism can be defeated through war.
  - (d) feels that war is the only way through which terrorism can be defeated.
  - (e) thinks that war is a form of terrorism.
- 18. According to the passage, which of the following would not be a consequence of the steps 'we' have decided to take against terrorism?
  - I. violation of civil-liberties.
  - II. raining bombs upon a country.
  - III. unleasing state terror.
  - (a) II and III only
  - (b) I only
  - (c) III only
  - (d) I and III only
  - (e) All three.
- 19. Which of the following is true according to the passage?
  - (a) India has decided to follow the American formula for fighting terrorism.
  - (b) India has toed the American line under American pressure.
  - (c) There was no choice for India except to accept the American formula.
  - (d) George Bush extended American expertise to help India incorporate the new formula.
  - (e) Metropolitan and non-resident Indians think that going the American way is the best course for India to fight terrorism.
- 20. According to the passage, it can be inferred about mainstream Indian media that
  - (a) their conduct has been highly irresponsible.
  - (b) they are playing a constructive role in making people aware about the threats and fear of war.
  - (c) they are highly nationalistic in their approach.
  - (d) they are doing a great job by exposing the government's policies.
  - (e) they are inciting war.

- 21. According to the passage, India's willingness and enthusiasm to act according to the US is a matter of
  - (a) embarrassment.
  - (b) shame.
  - (c) great satisfaction.
  - (d) disgust.
  - (e) anger.
- 22. According to the passage, the attitude of mainstream media towards politicians is
  - (a) grossly biased.
  - (b) objective.
  - (c) self contradictory.
  - (d) highly prejudiced.
  - (e) condescending.

"Indian reality," Panikkar said, "is fast-changing, changing for the worse." Referring to globalization and the growing power of trans-national corporations, he said: "An empire is forming before our eyes." He said that sections of society had come to accept the dominance of the market in social relations "as an ideal" and that the situation is ripe for "the making of an uncritical mind, a conformist mindset". Panikkar said that although the 'empire' promised modernity and affluence, it actually promoted social obscurantism and cultural backwardness. Panikkar argued tht the forces of communalism and empire complemented each other and had commonly shared interests. He said that the Indian government's reaction to Afghan war had clearly demonstrated the Indian ruling class' "uncritical acceptance of the dictates of the empire".

Panikkar said that activists working to develop a "counter-culture" had to realise that "culture is an area in which social power is exercised". He emphasized that this action was not a cultural programme, nor was it a performance or a spectacle based on various art forms. Only social activity on a continuous basis, aimed at the "radicalization of civil society", could develop such a counter-culture, in the process unsettling the existing equilibrium. He urged the People's Science Movement (PSM) to bring cultural action center-stage.

Panikkar referred to three factors that impede progressive cultural action—the changing relationship between the individual and the outside world, the influence of the market and the spirit of consumerism it enforces, and the rise of religiosity and communalism. These factors create a "myopic vision"

that is insensitive to social reality". The rise of the market results in the growing alienation of the individual from society. Consumerism, as the "ideology and the culture of the masses" creates a situation in which people's material aspirations are largely unrealistic. Panikkar argued that the anxieties generated by this contradiction formed the ground in which religiosity and communalism thrive.

Panikkar suggested two areas for cultural action. In the "creative realm", he suggested the use of art forms for cultural action. He referred to the Safdar Hashmi Memorial Trust's (SAHMAT) effective campaign against communalism, using paintings, music, street plays and other methods. However, he said the drawback with this type of cultural action was that it was largely sporadic. Panikkar suggested that cultural action in the constructive realm would be more effective as they would be far more sustained. Action in the constructive realm would enable the formation of cultural communities. Such communities could be either imagined or local. "Imagined communities are those that internalize common values and interests and their members relate to a common origin," he said. The intervention of Eklavya, a nongovernmental organization, in the field of education in Madhya Pradesh was an example of the development of such a community, he said. Local communities constitute the other type of counter-cultural action. They are "local" not because they address local issues, but because they undertake action on issues that are universally valid. Issues such as environmental degradation are prime areas that provide the basis for the development of such a community. Panikkar said such communities offered the possibility of "continuous engagement, a necessary precondition for the creation of social consciousness." Panikkar said that cultural action was needed to "de-ideologise civil society from the influence of globalisation and the logic of communalism." Referring to the inherent contradiction between the "interests of globalisation and the ideology of cultural nationalism", Panikkar said that the contradiction offered local communities the space to initiate counter-cultural action. In developing such a culture there was need to revitalize indigenous cultural resources while ensuring that they were not snared in obscurantism and revivalism, Panikkar added.

- 23. According to the passage, which of the following about 'local community' is true?
  - I. Environmental degradation is the most important area that provides the basis for the development of a local community.

- II. They don't address local issues.
- III. Local communities address only those issues that are universally valid.
- (a) Only III
- (b) Only II
- (c) I, II and III
- (d) Only I
- (e) I and II
- 24. According to the passage, what made local communities an agent for starting counter-cultural action?
  - (a) Social consciousness that leads to the formation of such communities.
  - (b) Contradiction between the interests of globalisaton and the logic of communalism.
  - (c) Continuous engagement between the interests of globalisaton and the logic of communalism.
  - (d) Cultural nationalism with the motive for initiating counter cultural action.
  - (e) Mutual support between the interests of globalisation and the logic of communalism.
- 25. It can be inferred from the passage that
  - (a) influence of the market formed the ground in which religiosity and communalism thrive.
  - (b) consumerism forces people to aspire for largely unrealistic material aspirations.
  - (c) growing alienation of the individual from the society is generally preceded by consumerism.
  - (d) Both (b) and (c).
  - (e) All of a, b and c.
- 26. According to the passage, counter culture
  - (a) challenged the dominance of the empire.
  - (b) aimed at the radicalisation of civil society.
  - (c) can be developed through continuous social activity.
  - (d) can be developed without unsettling the existing equilibrium.
  - (e) is essential to maintain our cultural superiority.
- 27. The tone of the passage can be best described as
  - (a) persuasive.
  - (b) highly critical.
  - (c) analytical.
  - (d) exploratory.
  - (e) descriptive.

Only the Kuomintang warlords who have brought the areas under their own rule to the brink of bankruptcy, have the utter shamelessness to spread the rumour, day in day out, that the Red areas are in a state of total collapse. The imperialists and the Kuomintang are bent on wrecking the Red areas, the work of economic construction now in progress there, and the welfare of the millions of workers and peasants who have achieved liberation. For this purpose, they have pursued a ruthless policy of economic blockade, in addition to organizing forces for military campaigns of "encirclement and suppression". But, leading the broad masses and the Red Army, we have not only smashed one enemy "encirclement and suppression" campaign after another, but have also been doing all the essential work of economic construction within our power in order to defeat this vicious economic blockade. In this respect, too, we have scored one success after another.

TEST 5

The principle governing our economic policy is to proceed with all the essential work of economic construction within our power and concentrate our economic resource on the war effort, and at the same time, to improve the life of the people as much as possible, consolidate the worker-peasant alliance in the economic field, ensure proletarian leadership of the peasantry, and strive to secure leadership by the state sector of the economy over the private sector, thus creating the prerequisites for our future advance to socialism.

The focus of our economic construction is to increase agricultural and industrial production, expand our trade with the outside, and develop the co-operatives.

Agriculture in the Red areas is obviously making progress. As compared with 1932, the 1933 agricultural output was 15 per cent higher in southern Kiangsi and western Fukien and 20 per cent higher in the Fukien- Chekiang-Kiangsi border area. The Szechuan-Shensi border area has had a good harvest. After a Red established, farm output often declines in the first year or two but picks up again as the peasant masses work with greater enthusiasm after the land is redistributed and ownership is settled, and after we have given encouragement to production. Today, in some places, farm output has reached and even exceeded the pre-revolution level. In others, not only has land that lay waste during the revolutionary uprisings been reclaimed, but new land has been brought under cultivation. In many places, mutual-aid groups and ploughing teams have been organized to adjust the use of labour power in the villages, and co-operatives have been organized to overcome the shortage of draught oxen. Moreover, the women are taking part in production in great numbers. None of this could have happened in the Kuomintang days. With the land in the hands of the landlords, the peasants then were neither willing to improve it nor did they possess the means to do so. Only since we have distributed the land to the peasants and encouraged and rewarded production has their labour enthusiasm blossomed forth and great success in production been achieved. It should be pointed out that in the present conditions, agriculture occupies first place in our economic construction, it is by agriculture that we solve both the most important problem of food, and the problem of raw materials such as cotton, hemp, sugar-cane and bamboo, which are needed for the making of clothes, sugar, paper and other necessities. The care of forests and the increase of livestock are also an important part of agriculture. Within the framework of smallscale peasant economy, it is permissible and indeed necessary to draw up suitable plans for the output of certain important agricultural products and to mobilize the peasants to strive for their fulfillment. We should pay closer attention and devote greater efforts to this. We must actively lead the peasants in solving such difficult and essential problems in production as labour power, draught oxen, fertilizer, seed and irrigation. In this connection, our fundamental task is to adjust the use of labour power in an organized way and to encourage women to do farm work. The necessary measures to solve the problem of labour power are organizing mutualaid groups and ploughing teams and mobilizing and encouraging the whole rural population to help during the busy spring and summer ploughing seasons. Another big problem is that quite a large proportion (about 25 per cent ) of the peasants are short of draught oxen. We must attend to organizing draught oxen co-operatives, encouraging the peasants without oxen to buy them for their common use through voluntary subscription to shares. Irrigation, which is the lifeblood of agriculture, also merits close attention. Of course, we cannot as yet bring up the question of state or collective farming, but it is urgently necessary to set up small experimental farms, agricultural research schools and exhibitions of farm produce in various places to stimulate the development of agriculture.

The enemy blockade has made it difficult for us to market goods outside our areas. There has been a decline in production in many handicraft industries in the Red areas, notably tobacco-curing and paper-making. But the difficulties of sending goods out are not entirely insurmountable. We have an extensive market of our own because of the mass demand in our areas. We should systematically restore and develop handicrafts and also certain industries, firstly to supply our own needs and secondly for trade with the outside. In the last two years, and especially since the first half of 1933, many handicrafts and a few industries have begun to look up because of the attention we have begun to devote to them and the gradual development of producers' co-operatives by the people. The most significant fields are tobacco, paper, wolfarm, camphor, farm implements and fertilizers (such as lime). Moreover, in our present circumstances, we should not neglect the manufacture of our own cotton cloth, medicines and sugar. In the Fukien-Chekiang-Kiangsi border areas, some industries have been set up which were previously non-existent, such as paper-making, cloth-making and sugarrefining, and they are doing well. To relieve the shortage of salt, people have begun to extract it from nitre. It requires proper planning to keep the industry going. With a scattered handicraft industry, detailed and comprehensive planning is of course, impossible. But fairly detailed production plans are absolutely essential for certain important enterprises, and first and foremost for state and co-operative enterprises. Every one of our state and co-operative industrial enterprises must pay attention from the very beginning to making accurate estimates of raw material output and marketing prospects in both the enemy areas and our own.

At the present time, it is particularly necessary for us to organize private external trading according to plan and for the state to handle certain essential commodities directly, for instance, the import of salt and cotton cloth, the export of grain and wolfarm, and the adjustment of grain supply within our own areas. Such work was first undertaken in the Fukien-Chekiang-Kiangsi border area and was started in the Central Area in the spring of 1933. With the establishment of the Bureau of External Trade and other agencies, initial successes have been achieved in this connection.

- 1. According to the passage, the economic blockade has resulted in
  - (a) decline in production in handicraft industries.
  - (b) decline in mass demand.

- (c) making goods difficult to export.
- (d) decline in production in tobacco-curing and paper-making.
- (e) An economic slowdown.
- 2. According to the passage, which is at the top in the priority list?
  - (a) economic reconstruction
  - (b) handicraft industries
  - (c) agriculture
  - (d) irrigation
  - (e) industry
- 3. According to the passage, what is the author's view on the concept of state farming?
  - (a) The author supports it and thinks that the setting up of state farms is urgently needed.
  - (b) The author doesn't support it and thinks that the time hasn't come to set up state-farms.
  - (c) The author supports it.
  - (d) The author supports it and thinks that the setting up of state farms is not urgently needed.
  - (e) The author obliquely supports it.
- 4. Why did the imperialists follow the policy of economic
  - (a) For encirclement and suppression of Red areas.
  - (b) For economic construction of their own areas.
  - (c) For the destruction of Red areas.
  - (d) To bring the Red areas under their own rule.
  - (e) For economic construction of Red areas.
- 5. According to the passage, the objective of the economic policy is
  - (a) probably, to establish socialism.
  - (b) to improve the quality of life of the people.
  - (c) to establish socialism.
  - (d) to make exports competitive.
  - (e) to increase productivity in all sectors.
- 6. According to the passage, which factor contributed most in increasing agricultural production?
  - (a) Bringing new land under cultivation.
  - (b) Reclamation of land-ownership of waste land
  - (c) Transfer of land-ownership to peasants.
  - (d) Greater participation of women in production.
  - (e) Using modern techniques for agriculture.

IT is easy to be depressed by Afghanistan. This year's opium crop will be the biggest in its history, accounting for up to two-thirds of national income. The hundreds of millions of dollars involved have corrupted government to the highest

Security is so precarious that, on one of the only two occasions when he tried to hold a rally outside Kabul, Hamid Karzai, the interim president, found his helicopter repelled by ground fire. Much of the country is too dangerous for foreign aid workers to visit, so the task of rebuilding a nation ravaged by 25 years of war is proceeding at a pitiful pace.

Kabul has mobile phones, enticing restaurants, unveiled girls going to school, a relative absence of physical danger and signs of economic growth. But in the south, things are still falling apart. The drug barons are so powerful that government has largely broken down. Outside a few lucky and mostly urban areas, schools are not re-opening there, water-pumps are not being installed, and roads are not being surfaced. This is the heartland of the Pushtun majority, and it cannot but be dangerous if the Pushtuns feel they are being left behind. The effort against drugs has been spectacularly mismanaged by the West-not least by Britain, which has taken the lead in a task it is not able to perform.

All the same, two prominent facts suggest that, overall, Afghanistan has indeed improved since America went to war there in October 2001, and is still continuing to do so. The first is that Afghans are voting with their feet. Since the fall of the Taliban, more than 3 million refugees have returned from neighbouring Iran and Pakistan—something they dared not do while the Soviet Union battled the mujahideen, or while rival warlords, having defeated the Russians, were rocketing Kabul, or while the Taliban, who drove out the warlords, were playing out their medieval religious fantasies while turning their country into a training camp for al-Qaeda. There has been no move in the opposite direction, even as the euphoria that surrounded the Taliban's fall has faded.

The second cause for optimism is the sheer enthusiasm with which Afghans have embraced the democratic process. Six months ago, many people feared it would prove impossible to hold an election in so benighted a country. Back then, fewer than one in four eligible Afghans had registered to vote. By election day, however, the number of registered voters was around 10.5m—embarrassingly close to 100 per cent of the rough estimate of those eligible,

suggesting a degree of fraud as well as a powerful desire to participate. Afghans have no experience of choosing their leader, and their choice is in no real doubt: it seems all but certain that the incumbent Mr Karzai will win the mandate he wants, though perhaps not until a run-off poll in November. Even so, they think it worth queuing to register and vote. That, surely, is an expression of faith in the future. Those hopes could easily be dashed: by large-scale violence on polling-day, or if one of the many attempts on Mr Karzai's life proves successful—or, more likely, if international donors use the elections as an excuse, once they are over, to walk away. But none of this is inevitable.

Three years on, what are the lessons for post-war state building? The first is the paramountcy of security. Without that, the victor in war can lose the peace. You cannot distribute aid, you cannot control narcotics, you cannot rebuild infrastructure and you cannot create a viable government.

The West botched post-war security in Afghanistan. America and its coalition allies have mostly confined themselves only to one part of the problem, tackling the remnants of al-Qaeda and the Taliban in the south-east. In this, they have achieved some success, hemming al-Qaeda into mountainous redoubts along the Afghanistan-Pakistan border, from which it and its still unapprehended leader, Osama bin Laden, pose a greatly diminished threat to the world. The Taliban are more amorphous, but are, at least, also confined to the south-east. They can no longer hope to retake control of the country. But they are still able to conduct devastating, if localised, raids.

However, the rest of Afghanistan was largely left to America's European allies. They have not done well. Until the start of this year, the "International Security Assistance Force" operated only in Kabul. When NATO took over the running of ISAF, in August 2003, it spent months haggling over troop numbers, helicopters and rules of engagement. It did eventually expand outside Kabul, bolstering security in the few areas where it operates in a limited way. But much more of this should have been done, and sooner. Some say that a larger force might have been construed as a foreign invader. And as the British discovered in the 19th century and the Russians in the 20th, Afghans unite against foreign domination. But the friendly reception they have given the ISAF in its limited excursions suggests that even illiterate tribesmen can tell the difference between occupiers and peacekeepers.

Iraq and Afghanistan are very different countries, not least in that Afghanistan seems genuinely to be one country,

whereas Iraq may turn out not to be. So was the nature of the war America waged in them. In Afghanistan, America fought a largely proxy war using the militias of the Northern Alliance, which gave it the mixed blessing of having well-armed local allies who expected to run the country afterwards. In Iraq (with the exception of Kurdistan) America and its foreign allies waged the war alone, and inherited no useful local forces capable of imposing order once the invasion was over. Nonetheless, two other lessons—on top of the need for security—can be read across from one conflict to the other.

One is the need for patience. The job of putting a failed state back together again is bound to be incremental, patchy and plagued by frequent reverses. A year ago, when Mr Karzai's authority did not extend outside his capital, it was easy to assume that Afghanistan would always remain a collection of fiefs. This may now be changing. In Herat, Mr Karzai has been brave enough to dismiss the warlord Ismail Khan as governor—though Mr Khan and his private army are still very much at large. In the north-west, the fledgling Afghan National Army has dared to back Mr Karzai's man against another brutal warlord, General Rashid Dostum. Mr Karzai has dumped another of the warlords, Mohammed Fahim, as his running-mate. Huge problems remain, but it is no longer impossible to imagine a future in which Afghanistan becomes a unified and reasonably well-governed country.

The final lesson for Iraq is that legitimacy matters. In Afghanistan, care has been taken to create a government that Afghans may, with luck, consider their own. A UN-sponsored conference drew up the basic plan within weeks of the end of hostilities. A transitional government was then elected, on time, by an Afghan Grand Assembly. A constitution was drawn up, also on time. Now presidential elections are being held, with only a minor delay. Parliamentary elections next year are supposed to provide the final piece of the puzzle.

In Iraq, America's blueprint for a democratic transition has been chopped and changed with bewildering frequency. And now that a clear plan has at last been drawn up, leading to an election in January, security has deteriorated so much that holding it may prove impossible. Much more should have been—and still needs to be—learned, from Afghanistan's failures as well as its successes.

- 7. Which of the following, according to the passage, suggest that conditions in the post-war Afghanistan have improved?
  - (a) Afghans are exercising their suffrage.

- (b) Afghans have welcomed the initiation of the democratic process.
- (c) Afghans have an uncanny knack of uniting against foreign domination.
- (d) Both a and b.
- (e) a, b and c.
- 8. According to the passage, which of the following is not a difference between the types of war-waged by the US against Iraq & Afghanistan?
  - (a) Proxy war.
  - (b) A war fought with allies
  - (c) A war fought to quell terror threats to the world.
  - (d) Either (a) or (b).
  - (e) None of the above.
- 9. What is the author's assertion regarding the democratic set-up in Iraq?
  - (a) It has collapsed.
  - (b) It should be based upon Afghanistan's post-war experiences.
  - (c) Security should be improved before initiating any such practices.
  - (d) Afghanistan's experiences as well as security should both be the base for setting up democracy in Iraq.
  - (e) None of these.
- 10. Which of the following on the part of Karzai may prove that he wants uniformity in Afghanistan and is trying to exercise his government over the whole country?
  - (a) His efforts at holding a rally inside Kabul.
  - (b) His ousting of general Dostum from Herat.
  - (c) His good relationship with his running mate, Mohd Fahim.
  - (d) Dismissing the warlord Ismail Khan in Herat.
  - (e) None of the above.
- 11. Why is it that the lessons of Afghanistan may not prove totally applicable to Iraq?
  - I. Unlike Iraq, Afghanistan is one country.
  - II. Security fears are more in Iraq than in Afghani-
  - III. Afghanistan will always remain a country of warlords.
  - (a) I, II

- (b) I only
- (c) I, III
- (d) I, II, and III
- (e) II only
- 12. Which of the following is not a lesson to be carried over from Afghanistan to Iraq, in the context of implementing the democratic process in Iraq?
  - (a) The need for security.
  - (b) The need for patience.
  - (c) The need for local allies.
  - (d) The need for legitimacy.
  - (e) The need for installing democratic processes.

Over the past decade, there has been a sea change in China's economic policies. Like other developing countries, which are attempting to become more export-oriented, China has started to set up free trade zones. These zones are called "Special Economic Zones" (SEZ's) and feature various incentives designed to encourage foreign investment. What is the significance of these zones? Have they really played an important role in the development of the economy of China? In this paper, I first describe the background to the establishment of these zones, looking at China's economy before the 1970s. Then I describe some of the aims and characteristics of the SEZ's. Lastly, I attempt to assess the significance of the SEZ's in the development of the wider Chinese economy.

Historically, China has adopted an inward-looking strategy to its economic development. Successive Chinese governments thought that the economy could grow purely through self-reliance. However, there are always limitations to what a country can do by itself, for example, limitations in raw-materials, natural resources, technology, etc. These can hold back the growth of an economy and certainly China's economic growth lagged far behind much of the rest of the world upto the 1970s.

By contrast, countries like the USA were achieving significant economic growth in this period because they were practising foreign trade policies which facilitated free trade. Any shortages in the domestic economy, for example oil in the USA or Japan, wheat in the Soviet Union or cars in India, could be compensated for by imports. Foreign trade, then, could help to aid economic growth.

The export trade is also vital. Not only can exports be a means of paying for imports, but they also help to earn foreign exchange. Since 1979, the Chinese government has recognised the importance of exports as a means of fostering economic growth. Economic policies and special incentive programmes have been introduced to increase exports. One measure taken was the opening of the five special economic zones.

The aims of the establishment of the SEZ's were to earn foreign exchange, to enhance employment, to attract foreign investment and to accelerate the introduction of technology and management expertise. The five SEZ's established were Shenzhen, Zhuhai, Shantou in Guangdong province, Xiamen in Fujian province and Hainan Island. In order to attract foreign investors and develop foreign trade, the five SEZ's offer similar packages of favourable incentives to foreign firms. One of the most attractive points of these packages is that income tax is fixed at the rate of 15 per cent, lower than that in other parts of China. Other advantages such as tax exemptions, land use rights, and banking and finance privileges are not available to firms operating outside the SEZs.

Many other non-financial advantages are provided inside the SEZs. Firms are provided relatively free-market environments with minimal government intervention. This means that private and joint-venture enterprises are free to hire their own workers. They are also free to set wages to reflect market conditions. Bonuses can be awarded to workers for outstanding performance.

The favourable impact of the SEZs on the economy of China is fivefold: They attract foreign investment, they help the growth of the export industry, they earn foreign exchange, they provide employment opportunities and lastly, they help the indigenous economy improve its level of technology. I would now like to look at some of these points in more detail.

The preferential treaties of the SEZs have attracted foreign investors to invest a huge amount of money in China. For instance, Hainan and Xiamen have attracted investments mostly from Taiwan. By June 1987, a total foreign investment of \$2.12 billion had been made in the five zones, amounting to one quarter of the total foreign investment in China during this period. The most marked success was registered in Shenzhen. By the end of 1986, it accounted for \$1.4 billion through more than 4000 economic cooperation agreements. One significant factor is that the investment has not been confined to the export industry, but has permeated other

sectors such as infrastructure construction, commerce, tourism and real estate.

The establishment of the SEZs has opened a way for China to increase its trade with foreign countries. They not only enhance trading activities such as foreign investment and tourism, but also help China to earn foreign exchange through these activities. As all five SEZs are coastal cities, they are convenient for ocean transport routes and help to promote the export industry. Preferential policies have encouraged foreigners to set up export-oriented factories in the territories. From 1985 to 1987, an annual average real growth rate of 83 per cent was recorded for exports from the five zones. Shenzhen's exports, for example, grew at an average rate of 70 per cent during this period. At the same time, the proportion of the SEZs' industrial products which went to export had risen to 53 per cent by 1987.

Since the beginning of the open-door policy, small-scale private businesses have been allowed to coexist with state enterprises. This has increased employment opportunities for local people and raised the level of economic activity. Also, many state workers sense that going into business on their own may provide greater income potential. They generally adopt an attitude commonly known in China as "I Bu Zho Er Bu Shu", which, loosely translated, means refusing to work and refusing to relax. Many prefer to work for joint-venture firms for higher wages. So the average income in SEZs now ranks as the highest in China.

In theory, advanced technology and know-how will also flow into the country as a result of foreign investment. In turn, with increasing exports, the force of international competition may bring greater pressure on Chinese firms to adopt more efficient work practices. It is perhaps questionable how much benefit the wider Chinese economy has reaped from these investments. The technology, patents and know-how remain firmly the property of, and are controlled by the parent companies. It may however be the case that in the long run, the work culture and practices adopted by foreign companies could have some washback effect over wider economic practices in the country.

In conclusion, the establishment of the SEZs has helped to increase the export trade which in turn, has helped to improve the Chinese economy. Preferential treaties have been offered in the five SEZs to attract foreign investment. A large amount of foreign investment has occurred not only in the export trade, but also in infrastructure construction, commerce and tourism. Foreign companies have been

encouraged to set up factories in the territories and the export industry has grown. Job opportunities have been provided for locals as factories need labour and the average income of the people has increased. In addition, advanced foreign technology has been brought in with the inflow of foreign investment. All these factors have contributed to the growth of the Chinese economy. It remains to be seen if these quantitative advances, in which the SEZs have played an important role, are matched by commensurate advances in the quality of life for the majority of Chinese people.

- 13. The main idea of the first paragraph is to:
  - (a) outline the main causes of the special economic zones.
  - (b) outline the main consequences of the special economic zones.
  - (c) give background information and describe the paper's outline.
  - (d) give the author's viewpoint on the special economic zones.
  - (e) introduce the special economic zones concept.
- 14. In paragraph nine, the writer is:
  - (a) outlining his personal opinions.
  - (b) reviewing possible courses of action.
  - (c) describing what has happened.
  - (d) outlining what needs to take place.
  - (e) recommending courses of action.
- 15. Which of the following can be inferred about the author's attitude towards the benefits of foreign investment:
  - (a) He is certain that it will benefit the Chinese
  - (b) He is uncertain that it will benefit the Chinese economy.
  - (c) He is certain that it will not benefit the Chinese economy.
  - (d) He is certain that foreign investment is counterproductive for the Chinese economy.
  - (e) None of these.
- 16. According to the paragraph, how is the governance of the SEZs characterised:
  - (a) unregulated.
  - (b) regulated and with favourable incentives.
  - (c) relatively deregulated compared to the rest of China.

- (d) deregulated free market zones.
- (e) regulated closely.
- 17. Which of the following can be inferred about the author's views about the success of the SEZs in China?
  - (a) successful.
  - (b) a qualified success.
  - (c) a potential success for the future.
  - (d) less successful than had been initially expected.
  - (e) an object failure.

# Passage 4

One phase of the business cycle is the expansion phase. This phase is a twofold one, including recovery and prosperity. During the recovery period there is ever-growing expansion of existing facilities, and new facilities for production are created. More businesses are created and older ones expanded. Improvements of various kinds are made. There is an ever-increasing optimism about the future of economic growth. Much capital is invested in machinery or "heavy" industry. More labour is employed.

More raw materials are required. As one part of the economy develops, other parts are affected. For example, a great expansion in automobiles results in an expansion of the steel, glass, and rubber industries. Roads are required; thus the cement and machinery industries are stimulated. Demand for labour and materials results in greater prosperity for workers and suppliers of raw materials, including farmers. This increases purchasing power and the volume of goods bought and sold. Thus, prosperity is diffused among the various segments of the population. This prosperity period may continue to rise and rise without an apparent end. However, a time comes when this phase reaches a peak and stops spiraling upwards. This is the end of the expansion phase.

- 18. Which of the following statements is the best example of the optimism mentioned in the passage as being part of the expansion phase?
  - (a) Public funds are designated for the construction of new highways designed to stimulate tourism.
  - (b) Industrial firms allocate monies for the purchase of machine tools.
  - (c) The prices of agricultural commodities are increased at the producer level.

- (d) Full employment is achieved at all levels of the economy.
- (e) Taxes are reduced in the economy.
- 19. It can be inferred from the passage that the author believes that
  - (a) when consumers lose their confidence in the market, a recession follows.
  - (b) cyclical ends to business expansion are normal.
  - (c) luxury goods such as jewellery are unaffected by industrial expansion.
  - (d) with sound economic policies, prosperity can become a fixed pattern.
  - (e) business expansion is folled by an economic depression.
- 20. Which of the following statements would be most likely to begin the paragraph immediately following the passage?
  - (a) Some industries are, by their very nature, cyclical, having regular phases of expansion and recession
  - (b) Inflation is a factor that must be taken into consideration in any discussion of the expansion phase.
  - (c) The farmer's role during the expansion phase is of vital importance.
  - (d) The other phase of the business cycle is called the recession phase.
  - (e) During the expansion phase, everyone is optimistic.

Revival of sick industries can be effective only when the rehabilitation schemes focus on organisational restructuring, and not just on financial recast. An in-house study by the BIFR reveals that promoters' non-compliance with revival scheme provisions is a key reason for the failure of rehabilitation programmes. Some other reasons are incompetent and/or dishonest management, state and central government policies and unexpected adverse developments in the external environments. According to RBI, internal factors like project appraisal and management deficiencies account for nearly 56 per cent of the total sick and weak units. Another reason is the limited stake of the promoter. Workforce, contrary to perceptions, is not a significant factor in industrial sickness.

Most of the new class of emerging promoters has no professional experience and their tactics are mostly unprofessional. With the proposed SICA Bill, the role of BIFR should change to that of a facilitator from that of a court. But this is defined very narrowly—the BIFR would be a facilitator only for creditors and promoters of the organisation, and try to work out a solution for the debt repayment. Moreover, the Operating Agencies that formulate the rehabilitation package are financial institutions and banks. They focus only on financial restructuring. What revival schemes need is a competent professional facilitator, and sick companies, transformational restructuring. The present BIFR approach grossly fails to understand how organisations behave and work. Therefore, the high failure rate of the rehabilitation schemes, 54 per cent for under Section 17(2) and 42 per cent for under Section 18(4), till Sept, is not surprising. Further, there has been a decline in the number of references received by the BIFR by 10.63 per cent compounded annually.

Moreover, there are instances of some units being intentionally forced to deteriorate, and the same promoters floating new units in other regions. At present, for the promoters, exit is an easy and desired option. The result is that though at times the BIFR has drawn up the rehabilitation plan, the promoter has not been interested in making the unit viable. All this shows the BIFR has to undergo a drastic change that should stress on the process of change and involve organisational restructuring by the shared learning approach that is characteristic of process based consultancy.

In process consultation, the consultant helps the client to perceive, understand and to act upon process events that occur in the client's environment. In other words, it addresses the problem solving activities of the client as opposed to the client's actual problems. The process involves the organisation and the consultant in joint diagnosis of the problem. The process consultant would urge the CEO that he should not leap into any kind of action programme (especially if it deals with changes in structure), until the organisation itself has done a thorough assessment of the strengths and weaknesses of the present structure.

In other words, the need for a change should first emerge from the organisation itself. Since the consultant, being from outside, would not know the people, their tradition, styles and personalities, he would only assist the organisation to become a good diagnostician so that it can solve the problems on its own. This would involve a partnership approach from the unions and the workers in joint diagnosis with the management.

This would in turn, result in lower resistance to change from the unions since they are also involved in the change process. This kind of partnership is crucial in creating the stake of the workforce in the organisation and building up trust that would help turnaround organisations.

- 21. The revival of sick industries have failed because of which of the following reasons:
  - I. Rehabilitation schemes focus on organisational restructuring.
  - II. Rehabilitation schemes focus only on financial
  - III. Rehabilitation schemes are not effective.
  - IV. Non-compliance with revival schemes.
  - (a) Only II & IV
  - (b) Only I & IV
  - (c) Only III & IV
  - (d) Only II.
  - (e) I and II only.
- 22. Industrial sickness according to the RBI, is majorly caused by all of the following, except:
  - (a) The limited stake of the promoter.
  - (b) Internal factors like project appraisal and management deficiencies.
  - (c) The attitude of the workforce.
  - (d) Lack of professional experience of new promot-
  - (e) All of the above are causes of industrial sickness.
- 23. Which of the following is incorrect with respect to the
  - (a) The SICA bill alters the role of BIFR from a court to a facilitator.
  - (b) BIFR will be a facilitator only for creditors and promoters of the organisation.
  - (c) BIFR is the main operating agency.
  - (d) Financial institutions and banks formulate rehabilitation packages.
  - (e) BIFR has outlived its power.
- 24. Revival schemes, according to the passage, should
  - (a) Focus on organisational restructuring.
  - (b) Have competent professional facilitators.
  - (c) Work out the solution for debt repayment.
  - (d) Both a & b.
  - (e) All of these.

- 25. Process based consultancy, according to the passage
  - (a) Follows the shared learning approach.
  - (b) Is one in which the consultant helps the client to study the process events.
  - (c) Improves the problem solving activities rather than solving the actual problems.
  - (d) All the above.
  - (e) Only a and b.
- 26. According to the passage, need for change
  - (a) is created by the joint diagnosis of the problem by the organisation and the consultant.
  - (b) is created by the action programmes.
  - (c) creates awareness of the strength and weakness of the present structure.
  - (d) should emerge from the organisation itself.
  - (e) occurs when the organisation fails to reach its goals.

## TEST 6

#### Passage 1

Henry Ford grinned at his wife Clara, while wiping his greasestained hands on a piece of cloth. His face was aglow with excitement. It seemed to tell his dame, "I have it, dear. Ready to be tested—All that it needs is your signal." Clara smiled while gently holding the cup with the gasoline, steady at an angle, so that the fuel could flow in at a regular pace. Ford whipped the engine out of its slumber by triggering the mechanism. The engine seemed reluctant to start. But, soon, it spluttered and as the fuel nudged, it roared loudly. The noise was deafening. Yet, to Henry and Clara it was sweet music. As soon as the engine was turned off, Henry ran into the outstretched arms of Clara. The two stood hugging each other, savouring the moment of success. Henry gently tilted Clara's face up and peered into her eyes. For a long time, they stood, almost mesmerised. Then Clara wriggled out, while gently reprimanding him for his dirty hands and the smears they had left on her cheeks where they had run freely. Did Henry cheer her, saying "These are the signs of my first triumph?" At least, that was his impression. Henry stood and admired the enigma which would revolutionise travel. His mind flashed back to the days of childhood. His father, a farmer at Michigan had eagerly looked forward to the birth of a son. He had his plans. He would help his son learn every thing about farming. He would direct the boy, equip him with the skill to tend plants to eliminate pests and weeds, to plough the field with the help of animals. He saw only one career for his son in fact that lay in farming.

Parental expectations have a distinct slant. Rarely ever do they provide for the natural proclivities of the progeny. By and large, they manage to have their way. In the process they stifle the child's basic talent. It is only the exceptionally strong and the extremely confident among the offsprings who fly against the set by their parents and streak their path to glory. Henry Ford did just that. He showed even when he was about five, that machines and tools were the playthings with which he could spend hours. Time seemed to stand still for him when he played with them. He would rip open a tool that had a rusted nut; he would tear apart a mechanism, which had a broken axle. He would look around for a suitable replacement. He would oil the joints, get the stains all over his clothes, run into trouble with his mother for spoiling the clothes. But all the reprimands failed to mend his ways. He occasionally went with his father around the hoe and the mechanical plough, the tools of the trade. His father, often exasperated, pleaded, cajoled, shouted and screamed. These had only temporary impact. Henry's heart was not in farming.

Mechanical contraptions fascinated him. He would pick up a watch, gently prise the lid on the back, up with a thin wedge peer into it, watch the spring pulsating with life, and notice the wheels, which ran into each other, rotating at steady paces. The whole world for the little boy lay there. He often dismantled the watch, checked each part, understood its role in the complex assembly, got them together again after cleansing, dusting and oiling them. Henry offered to repair clocks and watches held by friends and neighbours. A neighbour joked, "Every clock in the village shudders when it sees Henry coming". At the age of 13, he went with his father to the neighbouring town of Detroit. On the way, he noticed—the steam locomotive. This was in 1876. Henry could not take his eyes off the machine. How smoothly did the locomotive chug along? Could he not try his hand at producing something that would move on roads? Something that won't need rails to glide along? He pleaded with the locomotive driver to wait for a few minutes. He ran over, waved his hand to the driver of the locomotive, which had come to a halt a little away at the station. The driver glared at the boy—Henry hailed him, politely requested him to explain how the locomotive worked. The driver did not know much. Yet, he decided he would amuse the boy. Henry heard with rapt attention, while the driver explained to him the main

parts—the boiler, the pressure created in the boiler by water, heated by coal, the steam pressing the axles to turn the wheels. Henry sought some clarifications. The driver found it rather beyond him to answer the boy. He shooed the boy aside, and got into the engine. Henry rushed back to his father. The two moved on, Henry still wondering about the machine he would produce once he grew up, that would help people move fast on roads.

For making that dream come true, he had to fly against his father's desire. That pained him. He loved his father, but he was not willing to mortgage his future. His mind was not in farming. He told his father bluntly that he was moving to Detroit to learn the trade of a mechanic. His father was aghast at the suggestion. Had the boy lost his head? The two stood their grounds. Fiery words flew around. The sparks of angry exchanges boomed. Then came the truce. The father gave his son reluctantly, the permission to go. There was a tiny ray of hope that the boy would come back to the sylvan settings, finally settle down at the farm. This hope sustained the old man. It was at Detroit that Henry sharpened his native talent. He would spend hours to understand the intricacies of every machine, which was assigned to him by the small firm where he was employed. Soon, he gained a reputation as a boy who could repair any machine. His reputation was matched by hard work. Henry knew that he was getting the insight into machines. He would soon break off, start work on the 'horseless carriage' that he wanted to produce. He was finally earning enough to live in reasonable comfort. He fell in love with Clara Byrant. He was 25. Youthful desires were coursing through him. Yet he did not want to enter wedlock unless he was sure that Clara would share his dream.

The two sat together in a lonely place, while Henry detailed his future plans. He hinted that life would not be a bed of roses. His first love would always be machines. If she could share his enthusiasm, the two together could target for fame, wealth, and recognition. In other words, what he wanted of Clara was a multiple role. Not only should Clara be his wife, but his friend, critic, associate, my Woman Friday. That was not an easy role to play. However, Clara did not bat an eyelid. She responded with warmth to his proposal. The two decided to go through life hand in hand, creating a path that had never been trekked by others. It was hard work for Henry. During the day, he worked at the Edison Illuminating Company. At night, he huddled along with Clara, at the workshop, at the rear of their humble house. Henry would have an assortment of old parts—many of them partly worn out, brought by him from the pile of discards—from which he wanted to fabricate an engine that would work on gasoline. He had read about a gasoline engine developed by Dr Nicolaus A Otto, of Germany. Henry did not miss the cue. If he could develop such an engine, he would have the horseless carriage. He shared his excitement with Clara.

- 1. "Every clock in the village shudders when it sees Henry coming." Why did Henry's neighbour make this joke?
  - (a) Mechanical contraptions fascinated Henry.
  - (b) The whole world of the protagonist lay around machines.
  - (c) Henry had no interest in farming, as every other villager did.
  - (d) Henry always damaged all machines.
  - (e) None of the above.
- 2. The example of the engine driver is given by the author to elucidate which of the following character traits of Henry Ford?
  - (a) Inquisitive.
  - (b) Contemplative.
  - (c) Challenging.
  - (d) Perseverant.
  - (e) Intelligence.
- 3. The role of Clara in the success of Henry Ford can best be described in the following words:
  - (a) She was with him as a great support and a great friend.
  - (b) She was not exactly a part of his success.
  - (c) She should be given equal accolades for Ford's success.
  - (d) Her role was minimal in his success.
  - (e) Cannot be derived from the passage.
- 4. "Horse less Carriage"—this was the dream of Henry Ford. He got a major cue from Dr. Nicolaus Otto. This cue was in the form of
  - (a) Material help which Mr. Otto gave him.
  - (b) The idea, which he got from Dr. Otto's discovery.
  - (c) The confidence, which he got from Dr. Otto's discovery.
  - (d) None of the above.
  - (e) All of the above.
- 5. "while gently reprimanding him". What is the attitude of Clara towards Henry?

- (a) She was angry with Henry because of the smears she was having on her face.
- (b) She was reprimanding him because she did not like the gesture of her husband.
- (c) This was a gesture that showed her happiness.
- (d) Showed her condescending attitude towards Henry.
- (e) None of the above.
- 6. What is the normal relation between parental expectations and the natural proclivities of the progeny, as per the passage?
  - (a) They are often on different paths.
  - (b) Natural proclivities superimpose the parental expectation.
  - (c) They have no definite relation.
  - (d) Parental expectations build natural proclivities or, natural proclivities are inherent.
  - (e) They are mutually supportive.
- 7. According to the author, the sign of Henry Ford's first triumph was:
  - (a) Smears that were running freely on Clara's cheeks.
  - (b) The loud noise which was triggered by the start of the engine.
  - (c) The testing of Ford's invention.
  - (d) All of the above.
  - (e) None of the above.

#### Passage 2

Many scientists rely on elaborately complex and costly equipment to probe the mysteries confronting humankind. Not Melissa Hines, a behavioural scientist who is hoping to solve one of life's oldest riddles with a toy box full of police cars, jigsaw puzzles and Barbie dolls. For the past two years, Hines and her colleagues have tried to determine the origins of gender differences by capturing on videotape the squeals of delight, furrows of concentration and myriad decisions that children from 5 to 8 make while playing. Although both sexes play with all the toys available in Hines' laboratory at the University Of California, the experiments confirmed what parents and more than a few aunts, uncles and nursery school teachers already know. As a group, the boys favour sports cars and fire trucks, while the girls are drawn more often, to dolls and kitchen toys.

But one batch of girls defies expectation and consistently prefers boy toys. These youngsters have a rare genetic abnormality that caused them to produce higher levels of testosterone, among other hormones, during their embryonic development. On the average, they play with the same toys as boys, in the same ways and just as often.

Could it be that the high level of testosterone present in their bodies before birth has left a permanent imprint on their brains, affecting their later behaviour? Or did their parents knowing of their disorder, somehow subtly influence their choices? If the first explanation is true and biology determines the choice, Hines wonders, "Why would you evolve to want to play with a truck?"

Not so long ago, any career-minded researcher would have hesitated to ask such a question. During the feminist revolution of the 1970s, talk of inborn differences in the behaviour of men and women was distinctly unfashionable, even taboo. Men dominated fields like architecture and engineering, it was argued, because of social, not hormonal, pressures. Women had the vast majority of society's child rearing because few other options were available to them. Once sexism was abolished, so the argument ran, the world would become a perfectly equitable, androgynous place, aside from a few anatomical details.

But biology has a funny way of confounding expectations. Rather than disappear, the evidence for innate sexual differences only began to mount. In medicine, researchers documented about heart disease; what it does to women and that women have a more moderate physiological response to stress. Researchers found subtle neurological differences between the sexes, both in the brain's structure and in its functioning. In addition, another generation of parents' best efforts to give baseballs to their daughters and sewing kits to their sons, girls still flocked to dollhouses while boys clambered into tree forts. Perhaps nature is more important than nurture after all. Even professional sceptics have been converted. "When I was younger, I believed that 100% of sex differences were due to the environment." Says Jerre Levy, professor of psychology at the University of Chicago. Her own toddler toppled that utopian notion.

"My daughter was 15 months old, and I had just dressed her in her teeny little nightie. Some guest arrived, and she came into the room, knowing full well that she looked adorable. She came in with this saucy little walk, cocking her head, blinking her eyes, especially at the men. You never saw such flirtation in your life." After 20 years spent studying the brain, Levy is convinced: "I am sure there are biologically based differences in our behaviour."

Now that it is OK to admit the possibility, the search for sexual differences has expanded into nearly every branch of the life science. Anthropologists have debunked Margaret Mead's work on the extreme variability of gender roles in New Guinea.

Psychologists are untangling the complex interplay between hormones and aggression. But the most provocative, if as yet inconclusive, discoveries of all stem from the pioneering exploration of a tiny 1.4 kg universe: the human brain. In fact, some researchers predict that the confirmation of innate differences in behaviour could lead to an unprecedented understanding of the mind. Some of the findings seem merely curious. For example, more men than women are left-handed, reflecting the dominance of the brain's right hemisphere. By contrast, more women listen equally with both ears while men favour the right one. Other revelations are bound to provoke more controversies. Psychology tests, for instance, consistently support the notion that men and women perceive the world in subtly different ways. Males excel at rotating three-dimensional objects in their heads and females are better at reading emotions of people in photographs. A growing number of scientists believe the discrepancies reflect functional differences in the brains of men and women. If true, then some misunderstanding between the sexes may have more to do with crossed wiring than crossed

Most of the gender differences that have been uncovered so far are statistically speaking, quite small. "Even the largest differences in cognitive function are not as large as the differences in male and female height," Hines notes. "You still see a lot of overlap." Otherwise, women could never read maps and men would always be left handed. That kind of flexibility within the sexes reveals just how complex a puzzle gender actually is, requiring pieces from biology, sociology and culture. Ironically, researchers are not entirely sure how or even why humans produce sexes in the first place. Why not just one—or even three—as in some species? What is clear is that the two sexes originate with distinct chromosomes. Women bear a double dose of the large X chromosome, while men usually possess a single X and a short, stumpy Y chromosome. In 1990s, British scientists reported they had identified a single gene on the Y chromosome that determines maleness. This master gene turns on a host of other genes to the complex task of turning

a foetus into a boy. Without such a signal, all human embryos would develop into girls. "I have all the genes for being male except this one, and my husband has all the genes for being female," marvels evolutionary psychologist Leda Cosmides, of the University of California at Santa Barbara. "The only differences is which genes got turned on."

Yet, even this snippet of DNA is not enough to ensure a masculine result. An elevated level of the hormone testosterone is also required during the pregnancy. Where does it come from? The fetuses, own undecided testes. In those rare cases in which the tiny body does not respond to the hormone, a genetically male foetus develops sex organs that look like a clitoris and vagina rather than a penis. Such people look and act female.

The influence of the sex hormones extends into the nervous system. Both—males and females produce androgens, such as testosterone, and estrogens—although in different amounts. Men and women who make no testosterone generally lack a libido. Researchers suspect that an excess of testosterone before birth enables the right hemisphere to dominate the brain, resulting in left-handedness. Since testosterone levels are higher in boys than in girls, that would explain why more boys are left-handed.

Subtle sex-linked preferences have been detected as early as 52 hours after birth. In studies of 72 new-borns, University of Chicago psychologist Martha McClintock and her students found that a toe-fanning reflex was stronger in the left foot for 60% of the males, while all the females favoured their right. However, apart from such reflexes in the hands, legs and feet, the team could find no other differences in the babies responses.

One obvious place to look for gender differences is in the hypothalamus, a lusty little organ perched over the brain stem that, when sufficiently provoked, consumes a person with rage, thirst, hunger or desire. In animals, it performs a sexual function and is somewhat larger in males than in females. But its size need not remain constant. Studies of tropical fish by Stanford University neurobiologist Russell Fernald reveal that certain cells in this tiny region of the brain swell markedly in an individual male whenever he comes to dominate a school. Unfortunately for the piscine pasha, the cells will also shrink if he loses control of his harem to another male.

Many researchers suspect that, in humans too, sexual preferences are controlled by hypothalamus. Based on a study of 41 autopsied brains, Simon Levay of the Salk Institute for Biological Studies in San Diego announced last summer that he had found a region in the hypothalamus that was on average, twice as large in heterosexual men as in either women or homosexual men. Levay's findings support the idea that varying hormone levels before birth may immutably stamp the developing brain in one erotic direction or another.

These prenuptial fluctuations may also steer boys towards more rambunctious behaviour than girls. June Reinisch, director of the Kinsey Institute for Researches in Sex, Gender and Reproduction at Indiana University, in a pioneering study of eight pairs of brothers and 17 pairs of sister ages 6 to 18, uncovered a complex interplay between hormones and aggression. As a group, the young males gave more belligerent answers than did the females on a multiplechoice test in which they had to imagine their response to stressful situations. But siblings who had been exposed inutero to synthetic anti-miscarriage hormones that mimic testosterone were the most combative of all. The affected boys proved significantly more aggressive than their unaffected brothers, and the drug-exposed girls were much contentious than their unexposed sisters. Reinisch could not determine, however, whether this childhood aggression would translate into greater ambition or competitiveness in the adult world.

- 8. According to the passage, which of the following pairs is correct?
  - I. Leda Cosmides, California University, Los Ange-
  - II. Jerre Levy, Kinsey Institute, Indiana University.
  - III. June Reinisch, Chicago University.
  - IV. Melissa Hines, California University, Santa Bar-
  - (a) I, II, III and IV
  - (b) I and III only
  - (c) II and IV only
  - (d) I and II.
  - (e) None of these.
- 9. According to the passage, which of the following statement is correct?
  - (a) Hines work confirms that boys favour sports cars & fire trucks, while the girls are drawn more often to dolls & kitchen toys.
  - (b) Levy is sure that there are biologically based differences in our behaviour.

- (c) Levy is correct that 100 per cent sex differences were only due to the environment.
- (d) Both (a) and (b).
- (e) (a), (b) and (c).
- 10. During the feminist revolution of the 1970s,
  - (a) men dominated fields like architecture & engineering.
  - (b) women had the vast majority in society's child rearing field.
  - (c) men started showing interest in child rearing activities.
  - (d) both (a) & (b) above.
  - (e) None of these.
- 11. The human brain, according to the passage, weighs-
  - (a) Less then 1.4 kg.
  - (b) 1.4 kg.
  - (c) More than 1.4 kg.
  - (d) 2.4 kg.
  - (e) Cannot be inferred or concluded from the passage.
- 12. Which of the following statements, according to the passage, is incorrect?
  - (a) Males excel at rotating three-dimensional objects in their heads.
  - (b) Females prove better at reading emotions of people in photographs.
  - (c) More men, than women, are left handed, which shows the dominance of the brain's right hemisphere.
  - (d) Men are better at reading maps.
  - (e) None of these.
- 13. The psychologist Leda Cosmides, says—"I have all the genes for being male except this one, and my husband has all the genes for being female". What is she talking about?
  - I. Women bear double doses of the large X chromosome.
  - II. Men usually bear a single X and a short stumpy Y chromosome.
  - III. There is a single gene on the Y chromosome that determines maleness.
  - IV. A master gene that turns a foetus into a boy, without which, all human embryos would develop into girls.

- (a) I & II only
- (b) II, III & IV
- (c) II & IV only
- (d) III & IV only
- (e) I, III and IV.
- 14. According to the researches, as given in the passage, more boys are left-handed because:
  - (a) Testosterone levels are higher in boys than in girls.
  - (b) An excess of testosterone before birth enables the right hemisphere to dominate the brain, resulting in left handedness.
  - (c) Both (a) & (b) of the above.
  - (d) They are right brained.
  - (e) None of the above
- 15. In the studies of 72 new-borns, as done by the psychologist Martha McClintock of the University of Chicago, it was found that
  - (a) A toe-fanning reflex was stronger in the left foot for 60% of the males, while all the females favoured their right.
  - (b) A toe-fanning reflex was stronger in the left foot for 60% of the females, while all the males favoured their right.
  - (c) Both of the above.
  - (d) Apart from the toe fanning reflex there were no major differences between boys and girls.
  - (e) Both a and d.
- 16. According to the passage, which of the combinations is correct?
  - I. Hypothalamus is a lusty little organ perched over the brain stem.
  - II. Hypothalamus, when provoked, doesn't create any effect on the person with respect to his rage, thirst, hunger or desire.
  - III. Its size need not remain constant. (of the hypothalamus)
  - IV. Most probably, sexual preferences are also controlled by the Hypothalamus.
  - (a) III & IV only
  - (b) I, III & IV
  - (c) All of the above
  - (d) I, II and III
  - (e) Only I and III

Organisations are made of people. Without people, there can be no organisation. Where people are involved, some learning always takes place. The learning may be good or bad, but it happens all the same. In other words, organisations can and do learn, since their people can and do learn. This ability of organisations takes the shape of strategic and competitive advantage, when you begin to consider that we compete in a world full of knowledge. Not just that, there is so much of knowledge getting added each day that it is almost impossible to compete on any other basis. For sure, financial prudence and soundness helps, but that is useful only if you can compete in the first place. It therefore makes eminent sense for organisations to create an environment where lots and lots of people learn lots and lots of new things all the time. Yes, companies do recognise this, but they do mighty little about actually getting down to making it happen in big and continuous doses.

There is another completely different advantage of competing on learning. Organisational knowledge is the sum of many parts—the sum of many minds working together. This simply cannot be replicated by the competition. Why? The reason is quite simple. It is not possible to replicate the same set of circumstances and the same set of people existing in one company into another company. So, even if a few people leave and join forces with the competition, all is not lost. As a result, when discussions centre around return on investment, there is the invariable war cry for cost cutting. Such debates are common in corporate settings, and the outcome is invariably one-sided. Since the majority of costs relate to people, let's seize a hatchet and cut the headcount. Few, far too few, senior managers think about the incredible damage they are doing by taking such an approach. No one pauses to ponder over the loss of knowledge, human capital, and loyalty.

This is where the story of the titmouse becomes relevant. Alan Wilson, a zoologist and biochemist at the University of California at Berkeley, has been studying how animals learn. His research has established that there is a certain behaviour that enables primates and songbirds to share the position at the top of the table of evolved species.

Wilson's theory for accelerated anatomical evolution describes three characteristics that enable learning:

Innovation: As individuals and as a community, they have the ability to invent new behaviour. They are capable of developing skills that enable them to exploit and take advantage of their environment in newer and better ways.

Social propagation: Skills are propagated and transferred in a proper and established way to the entire community through direct communication, not genetically.

Mobility: Individuals of the species have the ability to move around. They use this ability to a tremendous extent. They flock and move in herds, instead of keeping to themselves like hermits.

To determine whether his theory would hold water, Wilson researched studies done on the British titmouse, a small songbird commonly found in Britain. The study is extremely revealing and goes thus: During the early part of this century, milk was distributed to the doors of British country houses in bottles without tops. The cream would settle at the top of the bottles. Two species of birds—the titmice and red robin, learned to siphon the cream from the bottles and get an enriched diet. This diet was obviously richer than other food the birds had. The digestive systems of these two species underwent a metabolism to cope with the extra nutrition. By the early fifties, the entire titmouse population had learnt how to pierce the aluminium caps and get to the cream. On the other hand, the red robins simply did not learn how to pierce the caps. There was a stray robin here and a stray robin there that had learned how to pierce the cap, but the species as a whole, simply failed to learn. In other words, the knowledge was simply, not passed to all red robins. What was the difference between the two species? Basically, the titmice underwent a remarkably successful process of institutional learning, while the red robins couldn't do so. This could not be explained as a difference in communicating ability. Both species possess the same range of ability to communicate. The difference lies in the process of social propagation—the manner in which titmice disseminate their skills between members of the community. And here is the difference. The titmice live in pairs (male and female) during spring season. They live thus until their brood grow big enough to fly and feed on their own. By the time summer arrives, the titmice can be seen hopping from one garden to another in flocks. Their propensity to flock is so powerful that the groups remain practically intact, roving the countryside. This movement pattern lasts through the summer.

On the other hand, red robins are highly territorial birds. They care for their young ones but have no ability to move as a community. They guard their turf jealously, and the only real communication that takes place is antagonistic and adversarial. Wilson concluded that birds that flock learn much faster. Moreover, everyone is able to learn. This greatly enhances their chances of survival, and speeds their

evolution. The lessons for organisational learning from this study are profound, to put it mildly. How many organisations can you find where the communication is not adversarial? Territorial behaviour and turf guarding are staple diets in corporate corridors. Most organisational structures, in fact, encourage this behaviour, albeit unknowingly. The results are the same, just think, organisational charts have boxes in which people are placed. They then have functions and divisions to make things worse. This is the perfect setting for the proliferation of bureaucracy and empire-building. No wonder Hammer and Champy describe this as "The Humpty Dumpty School of Organisational Management" in their book, "Re-engineering the Corporation". Mobility comes from moving people across functions and divisions. That may be the easier of the two criteria. The tough one is social transmission. As long as corporations are organised around functional concepts, social transmission will take place in an antagonistic manner. Here lies the key, then: CEOs who continue to organise their structures by function are doomed to head unlearning organisations. Hey, even the humble titmouse has figured that out. What is preventing the lofty man from emulating the titmouse?

- 17. What is the relationship between people, organisation and learning?
  - (a) Organisations are made up of people and where people are involved, even if they are bad, some learning takes place.
  - (b) Organisational learning is brought about by many minds of many people working together.
  - (c) Organisations are made up of people and the involvement of people evolves learning and this learning can lead to competitive advantage.
  - (d) All of the above.
  - (e) Both (b) and (c) but not (a).
- 18. The author talks of creating an environment of learning. Why is there a need for creating this type of environment?
  - (a) The world in which the organisations exist is full of knowledge, so it is necessary to imbibe this knowledge.
  - (b) The learning ability takes the shape of competitiveness and an environment is needed to combat this competitiveness.
  - (c) An environment of learning is needed because in an organisational set-up, there are many minds working together.

- (d) All the above.
- (e) (a) and (c) but not (b).
- 19. Which one of the following is not an advantage of competing on learning in an organisational set up?
  - (a) The leaving and movement of a few people doesn't create much difference.
  - (b) Knowledge is added each day and this knowledge becomes the parameter on which one competes.
  - (c) Competition brings financial prudence and soundness.
  - (d) Everyone in the organisation is able to learn and thus, exchange his or her knowledge.
  - (e) Both (c) and (d).
- 20. "Let's seize the hatchet and cut the head count". What is the author trying to express?
  - (a) Organisations stop all fresh recruitment to reduce costs.
  - (b) Organisations reduce the work force to cut costs.
  - (c) Both (a) and (b).
  - (d) Organisations focus on targets and cost cutting.
  - (e) None of the above.
- 21. What is the relation between Alan Wilson's study and organisational learning?
  - (a) Alan Wilson's experiment illustrates the process through which all organisational learning takes place.
  - (b) There is no direct relationship between Alan Wilson's study and organizational learning.
  - (c) His study gives lots of lessons on organizational learning through a simple example of titmouse and red robins.
  - (d) Two of the above.
  - (e) All of the above.
- 22. "Titmice underwent a remarkably successful process of institutional learning, while the red robin could not do so" because:
  - (a) Of difference in their communicating ability
  - (b) Titmice move in groups.
  - (c) There is a difference in the method they use to propagate their skills.
  - (d) Two of the above.
  - (e) All of the above.

- 23. What is "the Humpty Dumpty School of Organisational Management"?
  - (a) An institute where organisational management is being taken care of.
  - (b) It is a remark on the adversarial communication in an organisation, which leads to bureaucracy and empire building.
  - (c) Organisations encourage bureaucratic and empire-building tempers by these forms of structure of the "Humpty Dumpty School of Organisation Management".
  - (d) "The Humpty Dumpty School" is a hypothetical business school.
  - (e) A hilarious description of a management school.
- 24. Which one of the following is not a part of Wilson's theory of accelerated anatomical evolution on primates and songbirds?
  - (a) Their ability to invent new behaviour and capability of developing skills.
  - (b) Their ability of propagating their skills.
  - (c) Their staying in flock and possessing great mobility.
  - (d) All of these.
  - (e) None of the above.
- 25. What is the lesson which can be derived from the passage?
  - (a) Company heads should not organise structures by function.
  - (b) Company heads should form learning organisations.
  - (c) Company heads should learn from the example of Titmouse and Red robins.
  - (d) All of the above.
  - (e) None of these.
- 26. What does the passage advise CEOs to do?
  - (a) Emulate the titmouse and apply its principles.
  - (b) Acquire the ideas of organisational management.
  - (c) They should learn something about institutional
  - (d) They should become innovative and mobile.
  - (e) Learn from successful experiments of other organisations.

TWO new books on Leonardo daVinci have covers that are almost identical. Both authors have pored over Leonardo's notebooks, and claim to take us inside the mind of the Renaissance giant. Yet one book, a surprisingly short one, paints Leonardo as a genius, whereas the other, a doorstep of a volume, presents him uncut, looking something of a fallen angel. Which Leonardo you choose depends on whether you prefer your heroes on or off their pedestal.

Martin Kemp, an eminent Oxford art historian and Leonardo scholar, has condensed what he calls Leonardo's "strange career" as an engineer and musician into a series of key moments. Writing his book in the Tuscan villa that was once home to a smiling housewife named Lisa, thought to be the model for the most famous painting in the world, Mr. Kemp warms to the ambience of the place before launching into the essential facts about the man. Yet, after an auspicious beginning, the book reads like a gallery guide to Leonardo, and this may be because Mr Kemp is organising a Europewide exhibition of Leonardo in 2006, called the Universal Leonardo Project. His is a convenient handbook for the show or for any of the 24 paintings he attributes to the artist, and the book is also worth buying for Mr Kemp's handy timeline and illustrated list of Leonardo's at the back. The prose, however, is more efficient than uplifting.

Charles Nicholl's long biography of the master is more gratifying to read, yet it ties itself in knots trying to follow every lead that Leonardo, his contemporaries and a legion of scholars have left behind. The author's goal is to show not the genius but, rather the man, and he does his best to drag Leonardo down to earth. He begins with an anecdote about a note of Leonardo's jotted in the margins of an exposition on geometry: he is stopping work, the note explains, because his soup is getting cold. More details follow about Leonardo's animal-loving vegetarianism and about his inability to get a job done on time. A Freudian analysis of Leonardo's paintings of the Holy Family attempts to expose the artist's problems with father figures (Joseph is always absent, you see). And you learn more perhaps than you might wish about the homoerotic impulses in Leonardo's angels. That Leonardo, like Michelangelo and Botticelli, was homosexual is not news, but the lurid details of his love life may surprise some.

Such information would be more enlightening if it informed an analysis of how Leonardo became the great creative thinker we now consider him to be. Yet, the only clues about the development of Leonardo's exceptional mind come from the fact that he was the illegitimate son of a notary; as such, he was not allowed to follow in the family business and was therefore, spared a rigid education.

Instead, he was sent with his mother to live on a Tuscan farm. There, a deep love for nature was fostered, while his mind was able to develop, unfettered to an unusual degree. Leonardo was then apprenticed to a Florentine artist, Verrocchio, at a time when many artists were interested in the fashionable new technique of perspective and oil painting.

According to both books, Leonardo's fascination with engineering came from watching the construction of Brunelle schi's vast dome over the cathedral in Florence. Yet, other young artists who worked in Medici Florence had also turned their hands to everything, from painting to architecture and interior decoration. So what was special about Leonardo?

First, as Giorgio Vasari said in the 16th century, Leonardo had a "heretical" state of mind. So great was his curiosity about how things worked that he would believe only what had been proved empirically before his eyes. The clandestine dissections that got him in trouble with the pope flowed logically from a desire to learn how the body worked, the better to be able to render it in art.

Second, Leonardo was obsessed with birds, and claimed that his first memory was of being visited by a red kite in his cradle. Mr Nicholl constructs intricate theories about this, finding hidden bird patterns in the folds of the skirt of the "Madonna of the Rocks", among other places.

Mr Nicholl's book brings the reader no closer to the nature of Leonardo's genius, though a better understanding of the man, warts and all, does emerge—a subtler appreciation of a man, for instance, who devised war machines for the violent Cesare Borgia, yet also bought caged birds to set them free. Leonardo's love of birds and his desire to "conquer the resistance of the air" is the lasting and original detail of this book. Metaphorically, Leonardo flew, because he was for ever asking why.

- 27. On the basis of which of the following does the author want us to decide our choice for a particular book?
  - (a) The desire to read Leonardo as a good character or a bad one.
  - (b) Which one of the writers was more effective.
  - (c) The contents of the book.
  - (d) Our personal preferences.
  - (e) Both a and d.

- 28. Which of these bring about the exact definition of Leonardo Da Vinci's character, according to Martin Kemp?
  - (a) Leonardo had a strange career.
  - (b) Leonardo's brilliance lay in his penchant for a variety of subjects.
  - (c) He is a genius in paintings.
  - (d) He is the subject of an exhibition—Universal Leonardo Project.
  - (e) None of these.
- 29. Which of these brings about the exact definition of Leonardo da Vinci's character, according to Charles Nicholl?
  - (a) He was a man who made mistakes and had weaknesses
  - (b) He was a down-to-earth person.
  - (c) He was a perverted person, indulging more in narcissism.
  - (d) He was a rebel.
  - (e) None of the above.
- 30. According to the paragraph, homosexuality is not present in which of the following?
  - I. Botticeli
  - II. Michelangelo
  - III. Leonardo da Vinci
  - (a) only I
  - (b) I & II
  - (c) II & III
  - (d) only II
  - (e) none of these.
- 31. Which of the following according to the passage, is not correct?
  - (a) Leonardo believed only what was empirically
  - (b) Leonardo served as a trainee to Verrochio.
  - (c) Leonardo was the son of a notary.
  - (d) Leonardo had a historical bent of mind.
  - (e) none of above.

#### TEST 7

# Passage 1

IT SEEMED like a good idea at the time. Align top executives' pay with the performance of their firms and all will be uplifted—shareholders' returns and managers' returns too. What's more, there seemed to be a simple tool to do this: share options. Award managers the right to buy shares at a certain price, then when their efforts pushed the price above that level, they would make a profit, just like the shareholders.

That was in the late 1980s and early 1990s, and for a decade or so the idea seemed to hold good. The longest bull market in corporate history gave managers and investors alike, huge rewards. But the years since the stock market crash in 2000 have made it clear that something was badly wrong with this system. The rising tide of the market had, as it were, lifted all boats; when that tide receded, not all those boats fell to earth with a thump. Indeed, some boats didn't fall at all. In each of the three years from 2000 to 2002, shareholders in America's S&P 500 companies lost between 9 per cent and 22 per cent of the value of their assets. Yet the average total remuneration, including option gains, of the CEOs of big American companies was higher in 2002 than it was in 1999 and 2000. What had happened to the idea of pay as a reward for performance?

The fundamental error was to put most of the burden on stock options. Share prices rise for a host of reasons that have little to do with the performance of the company's managers—especially in a raging bull market with half-crazed speculators searching irrationally for the next big gain. And when share prices move sharply on shifts in actual and projected corporate results, and managers control the timing and presentation of those results, the temptation to manipulate the figures to show them in the best possible light can prove irresistible.

Finally, there was little downside to the stock-options strategy. Managers were often allowed to reprice their options so that they never showed a loss, and typically, they were able to sell them after a short vesting period, enabling them to reap passing short-term gains and removing much of the options' power to motivate longer-term performance. On top of this, shareholders were often unable to see that executives' total returns were still riding high when theirs were not because managers to some extent, controlled the information that their companies disclosed about their (often very complicated) remuneration packages. By and large, corporate philosophy on disclosure was—"the less the better".

Slowly the veil is being lifted from shareholders' eyes. William Donaldson, the chairman of America's Securities and Exchange Commission (SEC), said last week that "we have to

strive to get that information [on executive pay] in understandable and complete form". Last month, CALPERS, America's biggest pension fund, adopted a plan to "tackle abusive executive compensation" which includes submitting a proposal to the SEC next year for greater transparency of compensation packages. Does this then mark defeat for proponents of the principle of pay-for-performance as more and more firms reveal the extent to which the truth has been "Pay Without Performance"—the title of a recent book by two American law professors, Lucian Bebchuk and Jesse Fried?

Not necessarily, for the idea remains essentially sound. Even the highest-paid executive is still motivated by pay if not for the sake of further filling his pocket, then for the prestige it gives him among his peers. What is needed is further refinement of pay schemes that have relied too heavily on stock options. The urge to do this could be boosted next year if, as seems likely, American companies have to "expense" their options—ie, put a value on them in their accounts. That they have not had to do so until now has made options superficially "free" to the company issuing them, another dangerous aspect of their allure.

Stock options may still have a role to play if most of their windfall element can be eliminated, and executives' ability to offload them in the short-term is constrained. But other approaches too look promising. In Germany, companies are deeply wedded to the idea of annual cash bonuses. Tied to the right targets these can be effective. Three-quarters of Britain's FTSE 100 have schemes which give executives shares, but then only allow them to sell these shares after a number of years, and then only if the firm meets minimum performance standards relative to its rivals. Such "restricted" stock should be able to focus managers' minds on the medium to long term.

Whatever scheme is adopted, the only way that shareholders can judge whether it is really working and executives are being rewarded only for a job well done is if pay and performance figures are disclosed, transparently and in full. Big investing institutions should demand more such disclosure. And if that does not work, regulators should require it.

- 1. What is the central idea of the passage?
  - (a) The idea of relating top executive's rewards to their shareholders, remains a good one.
  - (b) Pay should be marked only on performance.

- (c) The employees of a company who are running a project must be given shares.
- (d) Shareholders should endeavor to match their profits with the amount of shares they purchase.
- (e) Top executive's rewards should be independent of shareholder's rewards.
- 2. Which of the following about CALPERS is not true according to the passage?
  - (a) It is America's biggest pension fund.
  - (b) It plans to seek greater transparency in its compensation package.
  - (c) It has published a book called 'Pay without Performance'.
  - (d) All of the above.
  - (e) None of the the above.
- 3. According to the passage, stock option to executives would be most profitable if:
  - (a) pay and performance figures are disclosed.
  - (b) pay and performance figures are not disclosed.
  - (c) either a or b.
  - (d) they are always on the rise.
  - (e) They are linked to business performance.
- 4. Out of the following, which one is a false statement according to the passage?
  - (a) From 2000 to 2002, shareholders lost between 9 per cent to 22 per cent.
  - (b) The average remuneration of the CEOs of big American companies was higher in 2002 than in 1799 and 2000.
  - (c) Executives are still motivated by pay.
  - (d) In Germany, companies prefer annual bonuses as incentives.
  - (e) Both a and b are false.
- 5. The style of the author in the passage can be best described as:
  - (a) Derogatory.
  - (b) Disparaging.
  - (c) Analytical.
  - (d) Theoretical.
  - (e) Conversational.
- 6. Which of the following would be a suitable title for the passage?
  - (a) The American Overpaid Executive.

- (b) The Transparent Organization.
- (c) Running Out of Options.
- (d) Executive Compensation.
- (e) Options and Futures.

JOHN CORNWELL, author of 'A New Life of Pope John Paul II,' would have made a fine devil's advocate when the pope's name is one day advanced for sainthood. Unfortunately, he will not be chosen, for John Paul II himself, some two decades ago, scrapped the custom of having a devout Catholic question the virtues of a candidate for beatification or canonisation. The old job of devil's advocate is now, in effect, performed by committee.

Devil's advocates were supposed to be fair-minded, and in the past, Mr. Cornwell, a prolific writer on Catholic matters, has at times been anything but fair. As he admits, "Hitler's Pope" (1999), his biography of Pope Pius XII, lacked balance. "I would now argue," he says, "in the light of the debates and evidence following 'Hitler's Pope', that Pius XII had so little scope of action that it is impossible to judge the motives for his silence during the war, while Rome was under the heel of Mussolini and later occupied by the Germans."

Chastened by this experience, Mr. Cornwell is now a better biographer. In this 'Life of John Paul II' he celebrates his subject's achievements as well as deplores the mistakes. The pope's heroism is affirmed. As a young would-be priest in occupied Poland, Karol Wojtyla was not intimidated by Nazi efforts to liquidate the Catholic clergy. A priest under Communism, he was again courageous. When the Soviet system imploded, "few would dispute that the inexorable and bloodless process had been initiated by the Polish pope."

Unfortunately, as Mr. Cornwell sees it, the siege mentality that enabled Polish Catholics to survive persecution has carried over into John Paul II's papacy. The pope presents himself as a reformist in the spirit of the Second Vatican Council, and indeed, he reveals himself as such in many things—in "liturgy, focus on scripture, out-reach to the world, compassion for the poor and disenfranchised." Overall, though, John Paul II is an authoritarian rather than a collegial pope, Mr. Cornwell says. He has centralised power in the Vatican where, in his dotage, it is increasingly exercised by reactionary cardinals.

Here the biographer almost gives way to despair. The astonishing feature of John Paul's campaign against

condoms has been the lack of public dissent by the bishops, even though many bishops privately disagree with the pope. The same, the author complains, goes for the pope's stands on married clergy, homosexuality and women priests, and for his willingness to meet such sinners as George Bush (whose re-election chances were perhaps boosted) and Tariq Aziz, then Saddam Hussein's deputy (thereby validating a deeply nasty regime). And by resolutely strengthening the centre during his papacy, Mr. Cornwell says, John Paul II has demoralized the periphery into sullen silence.

In referring to the "periphery", Mr. Cornwell overreaches himself. He is really interested only in those of the world's billion Catholics who are liberal westerners like himself. John Allen, an admirably objective American journalist, has a broader perspective. The pope he notes, has to ponder not just how something will play in Peoria, but also in Pretoria, Beijing and Sao-Paulo. Westerners, especially Americans, he notes, often want to do things in their own way, and see opposition from Rome as a form of oppression. But from Rome's point of view it often seems the reverse—it is saving the rest of the church from being involuntarily "Americanised".

Like John Paul II, members of the Curia, the Vatican bureaucracy, strive to "think in centuries". They believe that the Catholic church will still be around when Communism and Nazism are footnotes in history books and when George Bush and Tariq Aziz and even John Paul II are forgotten. They accept reform, but usually only after thinking about it long and hard. Mr. Cornwell's despair is premature.

- 7. Cornwell's account of Pope John Paul II can best be described as
  - (a) negative.
  - (b) balanced.
  - (c) flattering.
  - (d) sympathetic.
  - (e) critical.
- 8. According to the passage, what is the original name of the Pope John Paul II?
  - (a) Karol Wojtyla
  - (b) John Paul
  - (c) John Allen
  - (d) John Paul Allen.
  - (e) Can't be determined
- 9. Which of the following, in the light of the information given in the passage is not a negative side of the Pope?

- (a) his stand on homosexuality.
- (b) his meeting with Aziz.
- (c) his stand on married clergy.
- (d) his validation of women priests.
- (e) none of the above.
- 10. According to the passage, what is true from among the following viewpoints of Cornwell?
  - (a) There are elements of heroism in the Pope.
  - (b) The Pope is not an authoritarian.
  - (c) The Pope should not be concerned with every country of the world.
  - (d) The Pope does not believe in the future.
  - (e) The Pope does not deserve to continue.
- 11. According to John Allen, why is there an instinct of opposition towards Americans, from Rome?
  - (a) They do not want the values of the Americans to erode those of the church.
  - (b) Because the Americans do not like Rome's interference in world affairs.
  - (c) Both a & b.
  - (d) Because they feel that Americans do not follow Christian values.
  - (e) None of these.

#### Passage 3

When is a grid not a grid? It depends upon whom you ask. According to many in the computer industry, grid computing which roughly means the harnessing of the collective processing power of many computers in different places, is here today, and is already widespread. Yet according to others, grid computing, while promising, is still years away from becoming a reality. Who is right?

The problem is that "grid" has been co-opted as a buzzword and applied to a number of entirely different things. The term "grid computing" was originally coined by Ian Foster of America's Argonne National Laboratory in the late 1990s. He meant to draw an analogy between the supply of computing power and the supply of electricity, which is delivered along a wire, when you need it and with no need to worry about where it came from.

In 2002, Dr Foster drew up his own three-part definition of grid computing. A grid, he proposed, should co-ordinate computing resources that are not centrally controlled, rely on open standards, and provide more reliability than standalone machines. Alas for Dr Foster, his checklist immediately raised hackles within the computer industry, since much existing "grid computing" software fails to meet these criteria. Linking many small computers together to create a more powerful machine, for example, is not new, and is usually called network. For marketing purposes, however, some firms like to call it grid instead.

Similarly, grid is often confused, sometimes deliberately, for marketing reasons, with equally nebulous terms, such as utility computing, on-demand computing, autonomic computing and data-centre virtualisation. Behind all this terminology is the idea of continuously and automatically adjusting the configuration of a corporate data-centre to meet the demands made on it. But Andrew Chien, a grid pioneer at the University of California at San Diego, notes that though useful, such approaches generally eschew the harder part of the grid vision, which requires automated sharing of computing resources between different organisations, not just within one firm.

A well-known example of the sharing of computing resources across the internet is SETI@home, in which over half a million people help to sift radio-telescope readings for evidence of extra- terrestrial life using a glorified screen-saver running on their PCs. Other similar projects, such as IBM's new World Community Grid, conduct medical research. But David Anderson, the director of SETI@home, rejects the grid label, preferring the term "public resource computing". Others call it "internet computing" or "cycle scavenging". While it is grid-like in some respects, this approach is very taskspecific and is centrally controlled—so it is not truly grid.

Some firms, such as United Devices, sell proprietary software for cycle scavenging within a single company. Idle PCs can, for example, run drug-design software in a pharmaceuticals company or evaluate a derivatives portfolio for a financial-services firm. Early adopters of this technology claim impressive benefits. Yet since all the resources are controlled by a single organisation, purists argue that this is at best an "intragrid', just as an intranet is a private, internal version of the internet.

What of those deliberately decentralised systems, peerto-peer file-sharing networks? Some of them, at least, operate using open standards, and they are certainly robust: repeated attempts to close them down have failed. But they do not count as grid computing either, since they are mostly storage and distribution systems, and do not perform general purpose data-processing.

Grid computing is not entirely fictional, however: scientists have been building grids on a national or even global scale for several years. A good example is the LHC computing Grid, which links large clusters and storage systems in 87 computer centres around the world, for the benefit of particle physicists. Another example is TeraGrid, an American effort to link nine large supercomputing centres for scientific use. Even within the academic arena, though, convergence towards common standards is slow, partly because each grid project tends to reinvent the wheel. To tackle this problem, the European Union launched a major initiative called EGee this year, to provide a common grid infrastructure for scientists; America has a similar initiative.

The hope is that such projects will provide the first glimpse of "the grid", a single global computing grid that will do for data processing what the world wide web did for online publishing. Wolfgang Gentzsch, a former grid guru at Sun Microsystems, who is now director of MCNC, North Carolina's statewide grid initiative, says the term "grid" really refers to this ultimate goal, towards which today's systems are merely stepping stones. But it would, he admits, be more accurate to refer to them as "grid-like" or using "grid technology".

Constructing a single, global grid will mean solving difficult security, privacy and billing problems. Scientists have a tradition of sharing their results and resources, but others do not. Yet the hurdles are not so much technological as political, economic and terminological. The dream of a single grid, akin to the web in its simplicity and pervasiveness, still seems a long way off—as does agreement about what "grid" really means.

- 12. According to the passage, which of the following definition of clustering is correct?
  - (a) Harnessing of the collective processing power of many computers in different places.
  - (b) Linking of small computers.
  - (c) Maintenance of grids.
  - (d) Maintenance of small computers.
  - (e) None of the above.
- 13. According to the passage, a grid should not be mistaken as
  - (a) utility computing.
  - (b) on-demand computing.
  - (c) data centre virtualisation.
  - (d) Autonomic computing.
  - (e) All of the above.

- 14. According to the passage, which of the following benefit particle physicists?
  - (a) LHC computing grid.
  - (b) United Devices.
  - (c) IBM.
  - (d) Argon National laboratory.
  - (e) SETI @ home.
- 15. What is the author's assertion in the passage?
  - (a) Grid computing's biggest problem is that nobody knows for sure, what it is.
  - (b) Grid computing is the next big thing in computers.
  - (c) In the present scenario, it will be extremely difficult to put grid communication in practice.
  - (d) Grid computing is an unknown thing.
  - (e) None of the above.
- 16. Which of the following in the context of the passage, is correct?
  - (a) Grid computing is not very far away from reality.
  - (b) The New World Community Grid conducts research on unidentified terrestrial subjects.
  - (c) EGEE provides common grid infrastructure for scientists.
  - (d) SETI @ home is a project for explaining the definition of grid computing to people.
  - (e) None of the above.

TOM WOLFE'S new novel about a young student, "I am Charlotte Simmons", is a depressing read for any parent. Four years at an Ivy League university costs as much as a house in parts of the heartland—about \$120,000 for tuition alone. But what do you get for your money? A ticket to "Animal House".

In Mr. Wolfe's fictional university, the pleasures of the body take absolute precedence over the life of the mind. Students "hook up" (ie, sleep around) with indiscriminate zeal. Brainless jocks rule the roost, while impoverished nerds are reduced to ghost-writing their essays for them. The university administration is utterly indifferent to anything except the dogmas of political correctness (men and women are forced to share the same bathrooms in the name of gender equality). The Bacchanalia takes place to the soundtrack of hate-fuelled gangsta rap.

Mr. Wolfe clearly exaggerates for effect (that's kinda, like, what satirists do, as one of his students might have explained). But on one subject he is guilty of understatement: diversity. He fires off a few predictable arrows at "diversoids"—students who are chosen on the basis of their race or gender. But he fails to expose the full absurdity of the diversity industry.

Academia is simultaneously both, the part of America that is most obsessed with diversity, and the least diverse part of the country. On the one hand, colleges bend over backwards to hire minority professors and recruit minority students, aided by an ever-burgeoning bureaucracy of "diversity officers". Yet, when it comes to politics, they are not just indifferent to diversity, but downright allergic to it.

Evidence of the atypical uniformity of American universities grows by the week. The Centre for Responsive Politics notes that this year, two universities—the University of California and Harvard—occupied first and second place in the list of donations to the Kerry campaign by employee groups, ahead of Time Warner, Goldman Sachs, Microsoft et al. Employees at both universities gave 19 times as much to John Kerry as to George Bush. Meanwhile, a new national survey of more than 1,000 academics by Daniel Klein, of Santa Clara University, shows that Democrats outnumber Republicans by at least seven to one in the humanities and social sciences. And things are likely to get less balanced, because younger professors are more liberal. For instance, at Berkeley and Stanford, where Democrats overall outnumber Republicans by a mere nine to one, the ratio rises above 30 to one among assistants and associate professors.

"So what", you might say, particularly if you happen to be an American liberal academic. Yet the current situation makes a mockery of the very legal opinion that underpins the diversity fad. In 1978, Justice Lewis Powell argued that diversity is vital to a university's educational mission, to promote the atmosphere of "speculation, experiment and creation" that is essential to their identities. The more diverse the body, the more robust the exchange of ideas. Why apply that argument so rigorously to, say, sexual orientation, where you have campus groups that proudly call themselves GLBTQ (gay, lesbian, bisexual, transgendered and questioning), but ignore it when it comes to political beliefs?

This is profoundly unhealthy per se. Debating chambers are becoming echo chambers. Students hear only one side of the story on everything from abortion (good) to the rise of the West (bad). It is notable that the surveys show far more

conservatives in the more rigorous disciplines such as economics than in the vaguer 1960s "ologies". Yet, as George Will pointed out in the Washington Post this week, this monotheism is also limiting universities' ability to influence the wider intellectual culture. In John Kennedy's day, there were so many profs in Washington that it was said the waters of the Charles flowed into the Potomac. These days, academia is marginalised in the capital—unless, of course, you count all the Straussian conservative intellectuals in think-tanks who left academia because they thought it was rigged against them.

Bias in universities is hard to correct because it is usually not overt: it has to do with prejudice about which topics are worth studying and what values are worth holding. Stephen Balch, the president of the conservative National Association of Scholars, argues that university faculties suffer from the same political problems as the "small republics" described in Federalist 10: a motivated majority within the faculty finds it easy to monopolise decision-making and squeeze out minorities.

The question is what to do about it. The most radical solution comes from David Horowitz, a conservative *provocateur*: force universities to endorse an Academic Bill of Rights, guaranteeing conservatives a fairer deal. Bills modelled on this idea are working their way through Republican state legislatures, most notably Colorado's. But even some conservatives are nervous about politicians interfering in self-governing institutions.

Mr. Balch prefers an appropriately Madisonian solution to his Madisonian problem: a voluntary system of checks and balances to preserve the influence of minorities and promote intellectual competition. This might include a system of proportional voting that would give dissenters on a faculty more power, or the establishment of special programmes to promote views that are under-represented by the faculties.

The likelihood of much changing in universities in the near future is slim. The Republican business elite doesn't give a fig about silly academic fads in the humanities so long as American universities remain on the cutting edge of science and technology. As for the university establishment, leftists are hardly likely to relinquish their grip on one of the few bits of America where they remain in the ascendant. And that is a tragedy not just for America's universities but also for liberal thought.

17. In the passage, Tim Wolfe's novel, "I am Charlotte Simmons" could be at best described as

- (a) hated.
- (b) a mockery of the present American educational pattern.
- (c) a funny book.
- (d) a book dealing with diversity.
- (e) a satire about educational institutions.
- 18. Which of the following, in the light of the information given in the passage, is not an explanation of diversity?
  - (a) Students coming from diverse regions.
  - (b) Students of the two genders.
  - (c) Getting admission on the basis of race/gender.
  - (d) Both (a) & (b).
  - (e) (a), (b) and (c).
- 19. The Madisonian solution according to Mr. Balch in the passage, speaks about
  - (a) a system of checks and balances.
  - (b) preservation of the minority influence.
  - (c) promotion of intellectual competition.
  - (d) all of the above.
  - (e) a system of proportional voting.
- 20. Which of the following is incorrect according to the passage?
  - (a) Political parties get donations from Universities.
  - (b) Diversity enhances speculation, experiment and creation.
  - (c) Tom Wolfe's novel "I am Charlotte Simmons" is a great book for anybody.
  - (d) Universities are likely to change fact due to new legislation.
  - (e) None of the above.
- 21. Which of the following best describes the style of the author?
  - (a) Empirical.
  - (b) Theoretical.
  - (c) Prosaic.
  - (d) Practical.
  - (e) Unplanned and diverse.

#### Passage 5

For most people, the family is the most sacred part of private life, and therefore, the bit they are keenest to keep the state away from. That is why the idea that the British government has a child-care strategy sounds so immediately repellent. Surely the state already encroaches far too far in our lives: do we really want it playing with our babies? Yet in this area, it is worth curbing a natural aversion to government interventionism: child-rearing is part of the state's business.

Children are the focus of much of the British government's current hyperactivity. It has targeted its anti-poverty measures at families with children and is now extending preschool education and state-supported child care for working parents. It is also spending heavily on Sure Start, an expensive scheme focused on helping poor children.

The government has got into the nannying business for both good and bad reasons. The first bad reason is its determination to envelop everybody in the warm embrace of a Scandinavian-style welfare system. Its child-care policies are the sharpest illustration of the plan to extend tax funded benefits up as well as down the income scale by providing pre-school education for all and also, increasingly, keeping schools open after hours to offer child care to hard-pressed parents. In the background lies the idea that by providing the well-off as well as the poor with tax-funded benefits which they will want to hang on to, Labour will make it that much harder for a future Tory government to roll back the state.

The second bad reason is to get women out to work. The government has been pushing them in that direction for years, and providing child care will give them an extra shove. The government has a clear interest in getting mothers back to work—they will boost economic growth and tax revenue but families, not governments, should decide whether mothers trade their time with their children for cash.

The only good reason for the state to intervene in childrearing is that the youngsters themselves may benefit. If intervention substantially improves the prospects of the children concerned—and the gain must be substantial, to override the presumption that parents make the best parents—then that is justification in itself. Moreover, in that case, there would be further benefits for society at large. If children are troublesome, they make life hard for those they are taught with. If they grow up criminal, they will steal the cars of those who live near them. If they grow up ill-educated, they will contribute less to the economy.

Do pre-school programmes actually work? The answer is nuanced. While high-quality, part-time pre-school education (for three- and four-year-olds) seems to help children cope with school, dumping babies in nurseries all day long before they are one is also pretty clearly bad for them. So the

government needs to temper its enthusiasm for universal child care and working mothers.

And what about targeting children whose parents are too poor, too reckless or too drugged to give them a decent upbringing? Unfortunately, such schemes are not the panaceas they were once thought to be. Head Start, America's programme for pre-school education for three- and four-yearold disadvantaged children has consumed \$66 billion over four decades, and nobody really knows whether it has done any good. That is why the General Accounting Office has commissioned a large-scale study to answer the question. Sure Start, the version the British government is pushing, looks more promising—it starts earlier, is more intensive and involves mothers, which evidence suggests are all important—but as it rolls out, the British government needs to pay closer attention than Americas had to, whether this is a good way to spend money.

Those who fear letting governments further into their family life are rightly suspicious: governments are not to be trusted. Nor, sadly, are some parents. If the state can act to improve children's prospects, and hence society's prospects too, it should. The government's child-care strategy is not wrong in principle, but ministers also have to show that it will work, and that remains to be seen.

- 22. Why according to the passage, should the government not interfere in child rearing?
  - (a) because only mothers can understand babies.
  - (b) because as it is the government has too much to handle.
  - (c) family is a holy part of one's private life.
  - (d) the government simply does not have resources for it.
  - (e) none of the above.
- 23. Which of the following is/are the feature(s) of the child-care scheme that are described by the author as detrimental one(s)?
  - (a) It engulfs everyone in the welfare system.
  - (b) It wants women to go and work outside.
  - (c) Either (a) or (b).
  - (d) Both (a) and (b).
  - (e) Neither (a) nor (b).
- 24. Which of the following in the context of the passage, is correct?
  - (a) Sure start is a cost friendly scheme to help poor children.

- (b) Child care policies will curb benefits from tax funds.
- (c) Women must work to encourage economic growth and tax revenue.
- (d) Women should leave child rearing responsibilities to the govt.
- (e) None of the above.
- 25. What according to the author, is the way through which the government's child care programmes be really beneficial?
  - (a) The people who actually run them should be responsible.
  - (b) Pumping in more money into programmes such as Sure Start.
  - (c) Educating parents on the necessity of such programmes.
  - (d) Involving women to run such programmes.
  - (e) None of these.
- 26. Which of the following best describes the author's stand on child-care strategies by the government?
  - (a) supportive.
  - (b) critical.
  - (c) sarcastic.
  - (d) philosophical.
  - (e) Balanced.

#### TEST 8

# Passage 1

THE dollar has been the leading international currency for as long as most people can remember. But its dominant role can no longer be taken for granted. If America keeps on spending and borrowing at its present pace, the dollar will eventually lose its mighty status in international finance. And that would hurt: the privilege of being able to print the world's reserve currency, a privilege which is now at risk, allows America to borrow cheaply, and thus to spend much more than it earns, on far better terms than are available to others. Imagine you could write cheques that were accepted as payment but never cashed. That is what it amounts to. If you had been granted that ability, you might take care to hang on to it. America is taking no such care, and may come to regret it.

The dollar is not what it used to be. Over the past three years it has fallen by 35 per cent against the euro and by 24 per cent against the yen. But its latest slide is merely a

symptom of a worse malaise: the global financial system is under great strain. America has habits that are inappropriate, to say the least, for the guardian of the world's main reserve currency: rampant government borrowing, furious consumer spending and a current-account deficit big enough to have bankrupted any other country some time ago. This makes a dollar devaluation inevitable, not least because it becomes a seemingly attractive option for the leaders of a heavily indebted America. Policymakers now seem to be talking the dollar down. Yet, this is a dangerous game. Why would anybody want to invest in a currency that will almost certainly depreciate?

A second disturbing feature of the global financial system is that it has become a giant money press as America's easy money policy has spilled beyond its borders. Total global liquidity is growing faster in real terms than ever before. Emerging economies that try to fix their currencies against the dollar, notably in Asia, have been forced to amplify the Fed's super-loose monetary policy: when central banks buy dollars to hold down their currencies, they print local money to do so. This gush of global liquidity has not pushed up inflation. Instead, it has flowed into share prices and houses around the world, inflating a series of asset-price bubbles.

America's current-account deficit is at the heart of these global concerns. The OECD'S latest Economic *Outlook* predicts that the deficit will rise to \$825 billion by 2006 (6.4% of America's GDP) assuming unchanged exchange rates. Optimists argue that foreigners will keep financing the deficit because American assets offer high returns and a haven from risk. In fact, private investors have already turned away from dollar assets: the returns on investments in America have recently been lower than in Europe or Japan. And can a currency that has been sliding against the world's next two biggest currencies for 30 years be regarded as "safe"?

In a free market, without the massive support of Asian central banks, the dollar would be far weaker. In any case, such support has its limits; and the dollar now seems likely to fall further. How harmful will the economic consequences be? Will it really undermine the dollar's reserve-currency status?

Periods of dollar decline have often been unhappy for the world economy. The breakdown of Bretton Woods that led to a weaker dollar in the early 1970s was painful for all, contributing to rising inflation and recession. In the late 1980s, the falling dollar had few ill-effects on America's economy, but it played a big role in inflating a bubble in Japan by forcing Japanese authorities to slash interest rates.

This time round, it is a bad sign that everybody is trying to point the finger of blame at somebody else. America says its external deficit is mainly due to sluggish growth in Europe and Japan, and to the fact that China is pegging its exchange rate too low. Europe, alarmed at the "brutal" rise in the euro, says that America's high public borrowing and low household saving are the real culprits.

There is something to both these claims. China and other Asian economies should indeed let their currencies rise, relieving pressure on the euro. It is also true that Asia is partly to blame for America's consumer binge: its central banks' large purchases of treasury bonds have depressed bond yields, encouraging households in the United States to take out bigger mortgages and spend the cash. And Europe needs to accept, as it is unwilling to, that a weaker dollar will be a good thing if it helps to shrink America's deficit and curb the risk of a future crisis. At the same time, Europe is also right: most of the blame for America's deficit lies at home. America needs to cut its budget deficit. It is not a question of either do this or that: a cheaper dollar and higher American saving are both needed if a crunch is to be avoided.

Many American policymakers talk as though it is better to rely entirely on a falling dollar to solve, somehow, all their problems. Conceivably, it could happen-but such a onesided remedy would most likely be far more painful than they imagine. America's challenge is not just to reduce its currentaccount deficit to a level which foreigners are happy to finance by buying more dollar assets, but also to persuade existing foreign creditors to hang on to their vast stock of dollar assets, estimated at almost \$11 trillion. A fall in the dollar sufficient to close the current-account deficit might destroy its safe-haven status. If the dollar falls by another 30 per cent, as some predict, it would amount to the biggest default in history: not a conventional default on debt service, but default by stealth, wiping trillions off the value of foreigners' dollar assets.

The dollar's loss of reserve-currency status would lead America's creditors to start cashing those cheques—and what an awful lot of cheques there are to cash. As that process gathers pace, the dollar could tumble further and further. American bond yields (long-term interest rates) would soar, quite likely causing a deep recession. Americans who favour a weak dollar should be careful what they wish for. Cutting the budget deficit looks cheap at the price.

1. In the passage, the reason(s) enumerated for the necessity of dollar devaluation is/are

- I. big time borrowing from the government.
- II. big time spending by the consumer.
- III. big current account deficit.
- (a) I only
- (b) I & II
- (c) all
- (d) I and III only.
- (e) none
- 2. According to the passage, foreigners will keep financing the current account deficit because
  - (a) assets in America are profitable.
  - (b) it is risk free.
  - (c) either (a) or (b).
  - (d) they have no other investment options.
  - (e) both (a) & (b).
- 3. Which of the following factors is the main cause of its external deficit?
  - (a) high rate of public borrowing by America.
  - (b) low rate of household savings.
  - (c) both (a) & (b).
  - (d) the slow rate of growth in Japan and Europe.
  - (e) China pegging it's exchange rate too low.
- 4. The depreciating dollar as described in the passage,
  - (a) not supported by anybody.
  - (b) an alarming situation.
  - (c) due to the American policymakers.
  - (d) both (a) & (b).
  - (e) is a consequence of the trade deficit.
- 5. The reserve currency status, of the American currency, which it enjoys is fast losing ground, which will not lead to
  - (a) increase in long term interest rates.
  - (b) recession.
  - (c) the dollar going down further.
  - (d) none of the above.
  - (e) all of the above.

## Passage 2

Few phrases elicit so much controversy today. But is our climate truly changing? And if it is, do we know why is it changing? At the United Nations, the Intergovernmental

Panel on Climate Change (IPCC) certainly thinks the world is getting warmer and puts much of the blame on human activity. In its 2001 Third Assessment Report, the IPCC projects that average global temperature will increase by 1.6° to 6°C by 2100. The report indicates that, globally, the 1990s were the warmest decade on record, with 1998 the single warmest year. Accompanying this global-scale temperature increase were changes in other climate variables, such as precipitation, snow cover, glacier extent, and sea level. The changes in these variables are broadly consistent with the IPCC's estimate that Earth's surface warmed by roughly 0.6°C over the 20th century. The 2001 IPCC report concluded that "there is new and stronger evidence that most of the warming observed over the last 50 years is attributable to human activity." Atmospheric carbon dioxide and other trace gases help keep our planet warm by absorbing some of the Sun's heat that the Earth would otherwise emit back into space. This natural greenhouse effect makes the Earth's surface about 34°C warmer than it would be without the greenhouse gases. But human activities, such as burning of fossil fuels, have added greenhouse gases to the atmosphere. Atmospheric carbon dioxide levels, for example, have increased by about 30 per cent since the beginning of the Industrial Revolution. This human-caused enhancement of the natural greenhouse effect has contributed to the warming of the planet over the last century. Climate change can occur even in the absence of human activities. The climate system is like a bell that rings in a certain way. One form of "ringing" is the ocean-warming phenomenon known as El Niño. For starters, let's be clear about what we mean by "saving the earth." The globe doesn't need to be saved by us, and we couldn't kill it if we tried. What we do need to save-and what we have done a fair job of botching up so far—is the earth as we like it, with its climate, air, water and biomass, all in that destructible balance that best supports life as we have come to know it. Muck that up, and the planet will simply shake us off, as it's shaken off countless species before us. In the end, then, it's us we're trying to save—and while the job is doable, it won't be easy. As the summiteers gather in Johannesburg, we at this magazine are looking ahead to what the unfolding century—a green century—could be like. In this special report, we will examine several avenues to a healthier future, including green industry, green architecture, green energy, green transportation and even a greener approach to wilderness preservation. All of them have been explored before, but never so urgently as now. What gives

such endeavors their new credibility is the hope and a notion of sustainable development, a concept that can be hard to implement but wonderfully simple to understand.

With 6.1 billion people relying on the resources of the same small planet, we're coming to realize that we're drawing from a finite account. The amount of crops, animals and other bio-matter we extract from the earth each year exceeds what the planet can replace by an estimated 20%, meaning it takes 14.4 months to replenish what we use in 12—deficit spending of the worst kind. Sustainable development works to reverse that, to expand the resource base and adjust how we use it so we're living off the biological interest without ever touching the principal. "The old environmental movement had a reputation of élitism," says Mark Malloch Brown, administrator of the United Nations Development Program (UNDP). "The key now is to put people first and the environment second, but also to remember that when you exhaust resources, you destroy people." With that in mind, the summiteers will wrestle with a host of difficult issues that affect both people and the environment. Among them...

While the number of people on the earth is still rising rapidly, especially in the developing countries of Asia, the good news is that the growth rate is slowing. World population increased by 48% from 1975 to 2000, compared to 64% from 1950 to 1975. As this gradual deceleration continues, the population is expected to level off eventually, perhaps at 11 billion, sometime in the last half of this century. Economic-development and family-planning programs have helped slow the tide of people, but in some places, population growth is moderating for all the wrong reasons. In the poorest parts of the world, most notably Africa, infectious diseases such as AIDS, malaria, cholera and tuberculosis are having a Malthusian effect. Rural-land degradation is pushing people into cities, where crowded, polluted living conditions create the perfect breeding grounds for sickness. Worldwide, at least 68 million are expected to die of AIDS by 2020, including 55 million in sub-Saharan Africa. While any factor that eases population pressures may help the environment, the situation would be far less tragic if rich nations did more to help the developing world reduce birth rates and slow the spread of disease. Efforts to provide greater access to family planning and health care have proved effective. Though women in the poorest countries still have the most children, their collective fertility rate is 50% lower than it was in 1969 and is expected to decline more by 2050. Other programs targeted at women include basic education and job training.

Educated mothers not only have a stepladder out of poverty, but they also choose to have fewer babies. Rapid development will require good health care for the young since there are more than 1 billion people between ages 15 to 24. Getting programs in place to keep this youth bubble healthy could make it the most productive generation ever conceived. Says Thoraya Obaid, executive director of the U.N. Population Fund: "It's a window of opportunity to build the economy and prepare for the future." Though it's not always easy to see it from the well-fed West, up to a third of the world is in danger of starving. Two billion people lack reliable access to safe, nutritious food, and 800 million of them—including 300 million children—are chronically malnourished. Agricultural policies now in place, define the very idea of unsustainable development. Just 15 cash crops such as corn, wheat and rice provide 90 per cent of the world's food, but planting and replanting the same crops strips the fields of nutrients and makes them more vulnerable to pests. Slash-and-burn planting techniques and over reliance on pesticides further degrades the soil. Solving the problem is difficult, mostly because of the ferocious debate over how to do it. Biotech partisans say the answer lies in genetically modified crops—foods engineered for vitamins, yield and robust growth. Environmentalists worry that fooling about with genes is a recipe for a Frankensteinian disaster. There is no reason, however, that both camps can't make a contribution. Better crop rotation and irrigation can help protect fields from exhaustion and erosion. Oldfashioned crossbreeding can yield plant strains that are heartier and more pest-resistant. But in a world that needs action fast, genetic engineering must still have a roleprovided it produces suitable crops. Increasingly, those crops are being created not just by giant biotech firms but also by homegrown groups that know best what local consumers need. The National Agricultural Research Organization of Uganda has developed corn varieties that are more resistant to disease and thrive on soil that is poor in nitrogen. Agronomists in Kenya are developing a sweet potato that wards off viruses. Also in the works are droughttolerant, disease-defeating and vitamin-fortified forms of such crops as sorghum and cassava—hardly staples in the West, but essentials elsewhere in the world. The key, explains economist Jeffrey Sachs, head of Columbia University's Earth Institute, is not to dictate food policy from the West but to help the developing world build its own biotech infrastructure so it can produce things it needs the most. "We

can't presume that our technologies will bail out poor people in Malawi," he says. "They need their own improved varieties of sorghum and millet, not our genetically improved varieties of wheat and soybeans." For a world that is 70 per cent water, things are drying up fast. Only 2.5 per cent of water is fresh, and only a fraction of that is accessible. Meanwhile, each of us requires about 50 quarts per day for drinking, bathing, cooking and other basic needs. At present, 1.1 billion people lack development from an environmental view, the problems are global," says the U.N.'s Malloch Brown. "But from a development view, the front line is local, local, local." If that's the message that environmental groups and industry want to get out, they appear to be doing a good job of it. Increasingly, local folks act whether world political bodies do or not. California Governor Gray Davis signed a law last month requiring automakers to cut their cars' carbon emissions by 2009. Many countries are similarly proactive. Chile is encouraging sustainable use of water and electricity; Japan is dangling financial incentives before consumers who buy environmentally sound cars; and tiny Mauritius is promoting solar cells and discouraging use of plastics and other disposables. Business is getting right with the environment too. The Center for Environmental Leadership in Business, based in Washington, is working with auto and oil giants including Ford, Chevron, Texaco and Shell, to draft guidelines for incorporating biodiversity conservation into oil and gas exploration. And the center has helped Starbucks develop purchasing guidelines that reward coffee growers whose methods have the least impact on the environment. Says Nitin Desai, secretary general of the Johannesburg summit: "We're hoping that partnerships—involving governments, corporations, philanthropists and NGOs-will increase the credibility of the commitment to sustainable development." Will that happen? In 1992, the big, global measures of the Rio summit seemed like the answer to what ails the world. In 2002 that illness is—in many respects-worse. But if Rio's goal was to stamp out the disease of environmental degradation, Johannesburg's appears to be subtler—and perhaps better: treating the patient a bit at a time, until the planet as a whole at last gets well.

- 6. Which of the following sentences is true, according to the passage?
  - (a) Global warming, as observed for the past 50 years, is attributable to human activity alone.
  - (b) Global warming is mainly due to the presence of an excess of Carbon dioxide in the atmosphere.

- (c) The phenomenon of global warming is not very different from the EL Nino effect occurring in the oceans.
- (d) Global warming is harmful for the human race.
- (e) All of the above.
- 7. The Summiteers assembled in Johannesburg for
  - (a) attending the Earth summit, quite similar to the one held earlier in Rio-de-Janeiro.
  - (b) devising methods to attain sustainable development in the field of environmental protection.
  - (c) exploring avenues to a healthier future, including green architecture, green energy, green transportation & even wilderness preservation.
  - (d) creating a green century.
  - (e) None of these.
- 8. Which of the following sentences is incorrect, according to the passage?
  - (a) Though of late, it has come to our realization that our earth takes more than a year to replenish what has been utilized by us for about a year.
  - (b) People come before the environment, as with the depletion of resources, we are destroying people ultimately.
  - (c) Population is the key issue affecting the environment.
  - (d) The EL Nino effect has been caused by natural processes.
  - (e) None of these.
- 9. Which of the following conditions is responsible for sickness in big cities?
  - (a) Rural land degradation is pushing off the population into cities, thereby creating a perfect breeding ground for sickness.
  - (b) Smoke emissions from the factories and the big industries could be the cause.
  - (c) Economic development and family planning programs failed to get implemented.
  - (d) The poverty in slums leads to sickness.
  - (e) None of these.
- 10. Which of the following records show that an access to family planning and health care have proved effective?

- (a) That the collective fertility ratio is 50 per cent lower that it was in 1969.
- (b) That at least 68 million people are expected to die of AIDS by 2020.
- (c) That the world population has increased by 48 per cent from 1975 to 2000.
- (d) None of these.
- (e) Both a and c.
- 11. What was the breakthrough for the people of Uganda?
  - (a) Scientists here have developed corn varieties that are more resistant to disease and can adapt to soil having poor nitrogenous content.
  - (b) Scientists here have developed sweet potatoes that wards off viruses.
  - (c) New techniques for genetically modified crops have been developed here.
  - (d) All of the above.
  - (e) a and b.
- 12. The central theme for the passage is \_\_\_\_
  - (a) that we should strictly adhere to the guidelines of the summit so as not to be devoid of the basic amenities some day.
  - (b) That we must take care of our environment before we improve our standard of living.
  - (c) Taking the holistic approach for global purification should be the concern of every quarter of population.
  - (d) Serious participation to evade global degradation is required by each of us, before it is too late.
  - (e) Saving the planet is an imperative for everyone of us.

Penetrating studies carried out so far suggest conclusively that the human brain is the most unexplored and mystifying territory which would baffle scientists for quite a long time yet. Dr. V. S. Ramachandran, Professor and Director of the Center for Brain and Cognition at the University of California, Santiago, in his recent presentation of the subject at the Apollo Hospital, gave some tantalizing glimpses of the ways in which the brain behaves and responds for dictating behaviour and which he has dealt with in absorbing detail in his 'Phantoms in the Brainwidth' with his co-author, Sandra

Blakeslee. The picture which emerges is of a mocking, teasing presence inside the human head, submitting itself to the exacting demands of Einsteins on the one hand and remaining hopelessly beyond the reach of morons on the other. If, as Dr. Ramachandran has pointed out, India's achievements have ranged from the realistic to the abstract, it is an indication of the powers locked up in the brain which could throw up glittering images of the cosmic dance of Shiva brought to life in sculptures.

The diverse creativity of the human brain has enriched the world with discoveries spreading from that of the Copernican theory which replaced Earth and the planets by Sun as the center of the universe much to the indignation of the Roman Catholic Church, to the Theory of Relativity. It has led to the flight of imagination from the plays of Shakespeare to the writings of Boris Pasternak who had kept alive the longing for freedom in the Soviet Union even while remaining silent for nearly twenty years. However, it could go haywire and throw up hallucinations that are "more real than reality." A great deal which yet remains to be known about the brain is about its right and left "hemispheres" with the former having a much broader "searchlight" than the latter. While the left hemisphere is concerned with speech, language and semantics, the right is projected by Dr.Ramachandran as the "intellectual" half for taking care of the "more subtle aspects of language, such as nuances of metaphor, allegory and ambiguity". Any damage to either of the hemispheres could affect proper brain coordination which would look strange and despairing to a normal person. One of the lessons that are taught in elementary physics is that the image in a mirror is "as far away from the mirror as the object is in front of it." Dr. Ramachandran mentions the case of mentally ill patients who take this description literally and try to reach the image on the other side of the mirror as the result of the inability to distinguish the real object from its image. It is an instance of a brain suffering from a disturbance to its intricately placed perceptions.

Among the oft-mentioned instances of the strange manifestations of the brain is the still very little understood mathematical genius of Srinivasa Ramanujan. The world would never have known him but for the equations mailed to the Cambridge mathematician G.H. Hardy who was initially inclined to dismiss them as scribblings of a "crackpot". It was perhaps another case of the brain taking over at the right time when Hardy thought again of the equations and saw that no one else except Ramanujan had the imagination so far to think about them. The equations which could well have remained as just jottings on a piece of paper as they might have to most, were coming alive to Hardy to put him on a trail blazed by Ramanujan. If the brain is a teaser, it could be because it is very demanding on the geniuses who have blazed and would continue to blaze new trails in their chosen disciplines. The brain, which intrigued the caveman with images on the wall thrown up by the sunlight, continues to tease today's cosmonauts with the beckoning, expanding space. The real wonder here, however, is the brain that comprehends it all.

- 13. Which of the following sentences is true, according to the passage?
  - (a) Dr. Ramchandran's conclusion about the functioning of the brain is abstract.
  - (b) The abstraction focuses on the life in sculptures.
  - (c) To draw inference about the exact reaction of the brain towards different emotions is intricate.
  - (d) Scientists have completely worked out the brain's intricate processes.
  - (e) None of these.
- 14. Which of these incidents show the functioning of the brain in a wide spectrum?
  - (a) That it leads to the flight of imagination as in the plays of Shakespeare.
  - (b) It can throw up things as diverse as the theory of relativity and hallucinations 'more real than reality', at the same time.
  - (c) That the two hemispheres of the brain scrutinize very minutely, the different sundry affairs.
  - (d) Both a and b.
  - (e) None of the above.
- 15. Which of the following sentences is incorrect, according to the passage?
  - (a) The brain of mentally ill patients fails to discern the real object from its image.
  - (b) The brain of mentally ill patients takes the description of Dr. Ramchandran very seriously and tries to realize it literally.
  - (c) The brain of mentally ill patients, due to its improper perception, has semantic confusion.
  - (d) All of the above.
  - (e) Only b and c.
- 16. What probably could be the reason for the final selection of the equations of Ramanujan?

- (a) Mr. G.H. Hardy, to whom the equations were sent, was courteously requested by Ramanujan for his kind consideration.
- (b) The second hemisphere of G.H. Hardy's brain had become active and therefore, perceived the ingenuity of the material, which he had rejected initially.
- (c) Later on, the equations were considered in consonance with the methodology of Mr. Hardy.
- (d) Both a and b.
- (e) None of these.

There are a few instances of diseases that have laid waste, huge tracts of forests throughout India. Caused mainly by pathogens and pests, these diseases are deadly and are capable of wiping out entire forests and plantations, causing immense economic as well as ecological loss.

Meanwhile, forest pathologists and entomologists are grappling with new maladies that are surfacing almost every year. But with meagre resources and just a few experts working on the issue, things are heading virtually towards a cul-de-sac.

Moreover, no assessment has been made so far to quantify the devastation. While large chunks of forests fall prey to maladies, it is also an opportunity for some politicians and timber merchants to cash in on it. Research and documentation on forest disease, particularly on forest pathology, began in India way back in 1929, by pioneering pathologists KD Bagchi and BK Bagchi. Although it has been eight decades since then, not much headway has been made in this direction. The forestry sector today is ailing due to its misplaced priorities, resource crunch, and mismanagement. "Forest management lacks scientific approach", says Surendra Kumar, director of the Himalayan Forest Research Institute (HFRI), Shimla.

The scientific community involved with forest diseases is today a dispirited lot. With only a few stalwarts left in this field, forest disease is a neglected area of research. Moreover, bureaucracy is increasingly taking over the scientific institutions and scientists in most of these institutes are a marginalized group.

To top it all, there are no institutions dedicated to forest diseases. Although the ministry of environment and forests is the facilitator for such research, it is not paying enough attention to promote scientific research of forest diseases. In fact, government's lackadaisical approach came to the fore with the Sal borer epidemic in Madhya Pradesh in 1998. While forest bureaucracy slept, the beetles merrily continued to wipe out entire tracts of precious Sal forests. Eventually, with no solution in sight, thousands of valuable trees were hacked. There were also allegations that the Sal tragedy was a chance for the timber mafia in the state to cash in on timber through the legal loophole, with the nexus of politicians.

Today, things haven't changed one bit. India's forest department and research institutes have yet to formulate contingency plans to face any assault of similar dimensions.

Forest diseases are elusive. Although experts claim that they know quite a lot about forest diseases, there are still aspects of the maladies that are not completely understood. Says R.S. Bhandari, entomologist in the Forest Research Institute (FRI), Dehradun, "We know about all the important pests and insects, their life cycles and their development. But there are a few diseases which remain an enigma." According to Jamaluddin, head of the pathology department in the Tropical Forest Research Institute (TFRI), Jabalpur, "Due to micro climatic changes, we are discovering new aspects of the same disease every year. Diseases have also increased manifold." Another FRI scientist points out that although forest diseases are increasing, there is no study to estimate the economic and ecological damage caused by these pests and pathogens.

Varying with different geophysical regions and climatic conditions, pathogens and pests are essentially responsible for the tree maladies and their mortality. When the pristine, natural and mixed forests existed, forest diseases acted as a natural control measure to check the proliferation of a particular species that could threaten the balance of the ecosystem. Perhaps, this is why forest diseases paled into insignificance in the past. But today, with shrinking forests and increasing monoculture plantations, any outbreak of disease takes on a virulent form.

To top this, changed climatic and forest patterns and environmental pollution have given rise to newer forms of forest diseases. While trees are forced to take an additional load of human induced environmental changes, the introduction of monoculture has substantially increased the problems. Whatever little we know about forest diseases today come primarily through mycology, the study of forest pathogens. Mycology explains that the prime pathological reasons for forest disease are fungi, bacteria and viruses. "Among these, fungi play a major role, while the other two

are relatively less significant. There are 150 to 200 major pathological infections in central India. Out of these, only five per cent are bacterial. The rest are fungal," says Jamaluddin.

Most of these pathogens stay close to a tree, waiting for a chance to infiltrate. Their entry points are small openings or wounds in the tree. However, invasion is not always easy. Like human beings, trees also have antibodies that fight anything alien. In case of invasion from the trunk of a tree, the sapwood acts as shield and secretes enzymes to fight pathogens. But when attacked and conquered, there are tell tale signs in the form of knotty growths or fruit bodies that are extensions of the fungi in the tree.

- 17. Which of the following is not happening according to the author of the passage?
  - (a) Prioritizing forest management and weeding out maladies have become a question of concern for the forest professionals.
  - (b) Research and Documentation work on the forest pathology is being carried out simultaneously to estimate the spoilage.
  - (c) The scientific community is feeling increasingly dispirited with the enigmatic behaviour of the forest pathogens.
  - (d) All of these.
  - (e) Both (a) and (b).
- 18. With which of the following is the author most likely to agree with?
  - (a) There needs to be a more coordinated effort towards dealing with forest diseases in India.
  - (b) There is a likelihood of another forest disease epidemic, similar to the Sal Borer epidemic, spreading in the country.
  - (c) The ministry responsible should take up a more serious view towards research in forest diseases.
  - (d) All of these.
  - (e) Both (a) and (b).
- 19. Which of these incidents discourages the government to formulate any kind of concrete plans?
  - (a) The prevalence of malpractices such as the alleged nexus of politicians with some of the forest officials.
  - (b) The government is not able to work in concomitance with specialists, like entomologists & pathogenists.

- (c) India lacks specialists in this area of forestry.
- (d) The surfacing of new maladies every year.
- (e) None of these.
- 20. Which of these statements cannot be inferred from the passage?
  - (a) It is possible that the timber mafias could spread their network with help from vested interests in the political and bureaucratic brass.
  - (b) There are hardly any committed institutions in India, for the promotion of research in forest diseases in India.
  - (c) With the variation of different climatic conditions, pests responsible for forest tree degradation, dis-
  - (d) Forest disease research has slowed down considerably.
  - (e) None of these.
- 21. The discussion on the present condition of forest diseases proves that
  - (a) hitherto, forestry has been a neglected area of research.
  - (b) a lot more needs to be done by the government for sustaining the ecological balance.
  - (c) there must be a cooperative endeavour by scientists, government officials, and politicians to weed out the possibilities of forest diseases.
  - (d) Both (b) and (c).
  - (e) None of these.

### Passage 5

That science and scientific outlook have taken mankind forward in the last one hundred odd years is the tall claim that scientists make. What provoked me to write this piece is a little wonderful book, 'Limits of Science', by a great scientist and Nobel laureate, Sir Peter Medawar. Anyone who questions the above rhetoric is dubbed as superstitious or downright illogical, in addition to being unscientific. Rational thinking is said to be the key to good living and wisdom. How I wish this were that simple! Rationality, perforce, has to have its limitations. Rational thinking is based on the inputs from the five senses and possibly, some degree of "knowledge" derived from one's experience. All these do not come in lump sums but in bits and pieces. Pascal was the first to proclaim that there are two important aspects of man's life that are vital

to his actions. The first is to exclude reason in his dealings; and the second is to believe that there is nothing beyond reason. Going back hundreds of years, this thinker could have foreseen the truth of his statement despite the fact that the present scientific advances that we swear by had not existed then. He is not far off the mark even today.

Rational thinking and scientific outlook have enormous limitations. When you look beyond reason, you get an insight into Nature's functioning better. Nature has its reasons always, but reason cannot explore them many a time. How else can one feel love, hatred, jealousy, etc., in life? None of them can be measured in scientific terms. One could experience love but not be able to see it or measure its dimensions. To deny the effects of intense feelings of love for one's beloved or oneself is to deny the truth. If "science is measurement and measurement is science" as defined by Marie Curie, love as an emotion does not exist at all. No one has seen the wind, but when the trees dance and bend, the wind is passing by, wrote the poet.

Similarly, there are a lot of things that one can only feel but not be able to see and measure. The problem with mankind today is intolerance for others' views. Rousseau was despised by many of his peers for his strong and unconventional views. His life was in danger. Voltaire came to his rescue and asked Rousseau to stay with him to avoid any harm. Eventually, when Rousseau did come, Voltaire told him "I do not agree with a single word of what you say, but I shall defend to my last breath your right to say what you want to say."

That is the kind of tolerance that would take mankind forward. Science, if anything, has taken mankind backwards, if one critically looks at it philosophically, pushing him to the brink of self-destruction. Is not the threat of nuclear war from the terrorists based on scientific data? Is not the anthrax fever in the U.S. born out of complicated scientific research to get resistant germs to fight wars? Is not the ever-present threat of chemical warfare based on science?

Recently, when doctors went on strike in Israel, the death rate and morbidity fell significantly there only to bounce back to the original levels when there was peace between the striking doctors and the government. It is to be noted that morticians, whose business had all but disappeared when the strike was on, brokered peace between the striking doctors and the government! The so-called evidence-based medicine, when looked at carefully, is only evidence burdened and makes life that much difficult for both the doctor and the

patient. This is because scientific evidence gathered need not have a linear relationship to what happens inside the human body. The latter is run by the human mind, which is scientifically unfathomable. There are so many imponderables in Nature that one cannot answer all the questions in Nature with the help of science alone. There are many things outside the realm of science, which are beyond the explanatory capacity of science.

Any intolerance is the beginning of terrorism and "scientific intolerance" is one such. Scientific terrorism could be more lethal than the present day political terrorism. If allowed to go beyond control, it could destroy mankind forever. Let us look at some happenings that science will never be able to gauge.

Years ago, Leonard Leibovici showed that "remote, retroactive, intercessory prayer could do wonders for patient recovery in hospitals." A positivist that he was, he went a step further to urge doctors to include prayer in their armamentarium. He also gave evidence to show how scurvy could be controlled hundreds of years before the discovery of vitamin C, as shown by James Lind.

The prayer theme was taken to great scientific heights by a recent study in an American University hospital in a well controlled, randomised, triple-blind (the patient, his treating doctor and the relatives are kept in the dark) prospective study of heart attack patients. The prayed-for group had a very significant fall in all parameters of the illness in a coronary care set-up. Even death rate was significantly lower in the prayed-for group. This was replicated in patients who had severe infective fevers, in another milestone study.

Konotey-Ahulu documented some unexplainable deaths in his hospital in Africa (very thoroughly studied even after post-mortem) where medical science could not give any clue to the happenings. Recitation of the rosary, which derives its origin from the Tibetan monks, brought to the West via Arabs and other crusaders, and the yoga mantras that are well known in India, have been elegantly shown to reduce the rate of breathing which had significant improvement in the patients' illness. Yogic breathing is shown to lower elevated blood pressure, and many other cardiac parameters like aortic pressure, pulmonary artery pressure, the ventricular ejection fraction, etc., in those with severe heart failure. Tranquility of the mind that it bestows is immeasurable and is the added bonus.

Studies in America have shown that the Chinese and Japanese Americans had significantly higher death rates on

the 4th of every month. This was not seen in the White races. The Chinese and the Japanese believe the 4th to be a very inauspicious day of the month. Another milestone study in London showed that Friday the 13th was definitely dangerous for at least 50 per cent of the Britons who dared to go out and work that day. The other 50 per cent stayed home on those days, the real superstitious. The conclusion of the study was that Friday the 13th is definitely bad for at least one half of the British population.

If one is a conscientious medical scientist and observes patients very closely, one would discover many such inexplicable feats happening almost every day in a busy clinical setting. I call them as "butterfly effects", the phrase having been borrowed from Edward Lorenz of weather predictions fame. It was only after Lorenz got all the bouquets for his discovery of the method of predicting the weather that he discovered, to his surprise, that accurate prediction of the weather is impossible. He then propounded the butterfly effect. If one wants to know the limitations of science, one should study human beings in distress, where butterfly effect is the rule rather than an exception. Of course, doctors have been predicting the unpredictable all along.

One unforgettable incident comes to mind. One of my patients, whom I had known in my professional capacity for a very long time, was the priest of a very famous temple in the Malanad area of Karnataka. He was an authentic scholar of ancient Indian wisdom and was venerated by his people. He managed his temple affairs with total dedication. His temple was an example for others. When this incident occurred, he was well past ninety years of age but was very alert mentally as well as physically. His wife, who was in her 80s, was admitted under my care for a heart attack (inferior infarct, a milder variety with good outcome). When she was progressively improving on the third day, he made a strange request to me. He wanted her to be discharged that very day, as he was sure that she would meet her Maker the following day at 12 noon or so. I was nonplussed but, knowing him as I did to be very authentic, I was in a "scientific" dilemma. Ultimately, he took her against medical advice. His argument was that she should not die in a hospital.

I was shocked to learn from their son that the patient was in good shape at 11.55 a.m. She drank some water and died without any distress at 12 noon. I could not bring myself to believe this whole episode until after a year, the old man wanted to see me to thank me. He told me that he was going to die on a particular day at a given time and wanted all his children and grandchildren around him at that time. This prediction made me curious. He did keep his word and the end came as he had predicted. He had all his people around and slept on a banana leaf on the floor minutes before breathing his last! I have no scientific explanation even now. He was a great astrologer himself and had done very deep study of all the great works in that area. He had a reputation of being an authentic astrologer, in addition to his philanthropy—all for free!

This single episode is only one example of the many paranormal phenomena that one observes in day-to-day medical practice. Konotey-Ahulu's episodes are stranger than mine are, though. Maybe they are culturally different. He was practising in Africa. I know what Erik the Genius would say. Since he is an intellectual and a know-all scientist, he would label all our experiences as anecdotal. Of course, they are anecdotal, but it is anecdotes that make us wiser and not arrogant. Any knotty problem, when looked at more carefully, becomes more complicated. Great minds of yore knew this very well. Albert Einstein, during his last days, wrote: "I do not believe that this world is a wonder; I think it is a wonderful wonder." Stephen Hawking wrote: "I do not believe that there is God; if there is one I do not want him to interfere with my work."

Wisdom is not just the sum total of the inputs from our five senses. There is more to it than meets the eye. The effects of prayer on illness, the placebo-doctor effect on the human immune system, the "will to live" feeling that keeps people going despite intolerable pain and disability, and many other such scientifically proven methods of giving relief to suffering, make one believe in the possibilities beyond hypothesis refutation and measurements.

Science, like any other human activity, should have its limitations. It would be foolhardy to believe that science is the be all and end all of human wisdom. Very far from it. What we know is probably a very small fraction of what there is to know. This is the best education scientifically given in school. Live and let live. While one could have one's views, he should be tolerant of others' views as well and be ready to examine them without any prejudices. That would be progress and that alone can rid this world of all kinds of terrorism. One who understands science very well alone realises the depth of his ignorance. The genuine rationalist is one who has understood the limitations of reason. Positive sciences, at best, could answer questions like "how" or "how much." Positive sciences will never be able to answer the question

"why". The answer to the question "why" needs the knowledge of the limits to science.

- 22. Which of these aspects have become the core concerns for the author?
  - (a) That, pronouncing the great work of a Nobel laureate as rhetoric, seems illogical.
  - (b) That science is credited for the progressive outlook of mankind.
  - (c) The limitations of science are duly accepted.
  - (d) To launch a global crusade against scientific terrorism.
  - (e) None of these.
- 23. Which of these sentences is/are true, according to the passage?
  - (a) Anecdotal experience is a vital part of our wisdom.
  - (b) Scientific evidence cannot have a simple linear relationship with the operations inside the body.
  - (c) Any kind of intolerance is the beginning of terrorism
  - (d) According to Marie Curie, science is everything that can be measured.
  - (e) All of these.
- 24. What were the positive feelings among the scientific community about the strength of prayer?
  - (a) Prayers got acceptance because of the limitations that science is beset with.
  - (b) Prayers were found to be more effective for coronary patients.
  - (c) Several ailments like elevated blood pressure and heart failure could easily be cured by the recitation of prayers.
  - (d) Prayers cured coronary patients.
  - (e) None of these.
- 25. A remarkable finding that illustrates the limitations of science is
  - (a) A human being in distress is the exact replica of the limitations of science.
  - (b) The death rate of the Chinese & the Americans on the 4th of every month is higher, which remains unexplained.
  - (c) Exact prediction of the weather is not possible.

- (d) The "prayed-for" group had a very significant fall in all parameters of illness in a coronary care setup.
- (e) None of these.
- 26. What was the 'scientific dilemma' that the author was confronted with?
  - (a) On the one hand, his scientific wisdom didn't allow him to discharge the patient, while on the other, he knew the person who was suggesting otherwise, to be an 'authentic person'.
  - (b) His observation about the personality overpowered his scientific wisdom.
  - (c) It was too embarrassing for the author to take a hard decision about the critical condition of the patient.
  - (d) Both (a) and (b).
  - (e) None of these.
- 27. The main object of the writer is\_\_\_\_\_
  - (a) to arouse interest about the book of a Nobel laureate.
  - (b) to mitigate the preconceived notions of a reader about the limitlessness of science and the scientific method of rational explanation.
  - (c) to signify the role of the power of reasoning and wisdom along with the knowledge of science.
  - (d) Both (b) and (c).
  - (e) None of these.

# TEST 9

# Passage 1

Why do the vital organs of the body slow down on aging? Why do older people experience sleep disorders? A new study holds the molecular machinery of the "master clock" in the brain responsible for such malfunctions during old age. The study conducted by researchers at the University of Virginia and reported in the journal 'Proceedings' of the National Academy of Sciences, compares the working of the vital organs to a wall full of clocks with a large dominant clock controlling the synchronization of the peripheral clocks. The big clock continues to keep time, but, as it ages, its connecting signal to the smaller clocks weakens. Some of the smaller clocks eventually become desynchronized and some

stop running. This weakening of the signal, rather than a problem with the central timekeeper itself, apparently is the cause of alterations in the biological timing system in aging mammals—possibly including humans, according to the researchers. This may explain why older people experience sleep disorders—the signal from the master clock in the brain has weakened, even as it keeps on ticking. This weakened output causes some of the peripheral clocks in other organs to eventually stop oscillating or to fall out of proper sync, causing sleep disruption and malaise, the report says. Lack of sleep can affect more than a person's level of alertness. In the long term, it can disrupt the body's metabolism, affect eating cycles, lead to declining cognitive abilities and possibly, a shortened lifespan. Sleep disorders are also associated with Alzheimer's disease. Gene D. Block, professor of biology and one of the study's lead researchers, was quoted in the report as saying, "Our new finding demonstrates that the molecular machinery of the master clock continues to function normally. Taken together with our earlier studies, this suggests that there may be an agerelated failure of the conversion of the clock's molecular rhythm into the electrical or humeral signals that the brain uses for communication. These weakened central signals may fail to keep some peripheral clocks appropriately synchronized or, in some cases, even rhythmic." The scientists studied tissues from the brain and other organs of older mice and measured the activity of a gene that is a part of the biological clock. They found that the central clock in the brain, the suprachiasmatic nucleus, maintained proper periodicity and synchronization. Clocks in some peripheral organs, such as the liver and kidney of older animals, were either improperly synchronized or had lost rhythm entirely. "This new knowledge could eventually lead to new therapies for age-related desynchronization," Block said. "Arrhythmic or improperly synchronized tissues of old animals could possibly be stimulated by a treatment to oscillate normally."

- 1. Which of these factors is held responsible for the slowing down of the vital organs in old age, as laid down in the passage?
  - (a) Molecular machinery of the master clock and the peripheral clocks in the brain.
  - (b) Master clock in the brain.
  - (c) Weakening of the signals from the master clock in
  - (d) Arrhythnic oscillations of tissues of old animals.
  - (e) Sleep disorders.

- 2. Which of the following sentences is incorrect, according to the passage?
  - (a) The connecting signals of the big clock fail, as it ages.
  - (b) Alterations in the biological timing system are restricted to lower mammals only.
  - (c) The brain uses humeral signals, which are converted from the clock's molecular rhythm.
  - (d) Both (b) and (c).
  - (e) None of these.
- 3. What was the breakthrough achieved, as a result of the scientist's effort?
  - (a) The discovery of the fact that the clocks in some peripheral organs were either improperly synchronized or had lost their rhythm completely.
  - (b) The knowledge that the oscillation is necessary to maintain a person's level of alertness.
  - (c) The observation that the brain uses humeral signals for communication.
  - (d) Both (a) and (b).
  - (e) None of these.
- 4. Which of the following sentences is true, in the context of the passage?
  - (a) The brain of a guinea pig was used for the tissue experimentation.
  - (b) Declining cognitive abilities may be traced to sleeplessness.
  - (c) The big clock is directly synchronized to smaller clocks through tissues.
  - (d) There is likely to be an age-related failure of the conversion of the master clock's molecular rhythm into electrical or humeral signals.
  - (e) Both (b) and (d).
- 5. Which of the following sentences is incorrect, according to the passage?
  - (a) There is a similarity in the functioning of the brain and the vital organs of the human body with that of a wall full of clocks and the big clock synchronizing them.
  - (b) The molecular machinery of the brain is responsible for the entire malfunctioning occurring at older ages.
  - (c) The study of tissues from the brain and other organs of mice helped scientists discover that

even though the suprachiasmatic nucleus maintained time properly, the clocks in the peripheral organs were either out of sync or had lost rhythm entirely.

- (d) (b) and (c).
- (e) None of these.
- 6. What appears to be true, in the context of new findings?
  - (a) Sufficient information about the bipolar disease is necessary to ward off desynchronization.
  - (b) Age related failure hampers the synchronization of the peripheral clocks in the respective organs.
  - (c) Alzheimer's disease and sleeping disorders have a similar impact upon the human mind.
  - (d) Only (b) and (c).
  - (e) Only (a) and (b).
- 7. Alterations in the biological clock of ageing mammals are due to
  - (a) desynchronization of smaller clocks.
  - (b) destabilization of molecular machinery.
  - (c) arrhythmic functioning of the old tissues.
  - (d) Both a and c.
  - (e) None of these.

### Passage 2

It wasn't every day that Patricia Torres raced down the streets of Miami at 70 m.p.h. But then it wasn't every day that her daughter Nicole Cabezas hallucinated wildly, trying to jump out of the car, pulling off her clothes and ranting that people were following her, so this seemed like a pretty good time to hurry. Nicole, 16, had been having problems for a while now—ever since she was 14—and began closeting herself in her bedroom, incapable of socializing or doing her schoolwork, and contemplating suicide. The past few months had been different, though, with the depression lifting and an odd state of high energy taking its place. Nicole's thoughts raced; her speech was fragmented. She went without sleep for days at a time and felt none the worse for it. She began to suspect that her friends were using her, but that was understandable, she guessed, since they no doubt envied her profound gifts. "I was the center of the universe," she says quietly today. "I was the chosen one." Finally, when the chosen one was struck by violent delusions—the belief that she had telekinetic powers, that she could change the colors

of objects at will—Torres decided it was time to take Nicole to the hospital. Emergency-room doctors took one look at the thrashing teenager, strapped her to a gurney and began administering sedatives. She spent two weeks in the hospital as the doctors monitored her shifting moods, adjusted her meds and talked to her and her parents about her descent into madness. Finally, she was released with a therapy plan and a cocktail of drugs. Six months later, doctors at last reached a diagnosis: she was suffering from bipolar disorder. While emotional turmoil is part of being a teenager, Nicole Cabezas is among a growing cohort of kids whose unsteady psyches do not simply rise and fall now and then but whipsaw violently from one extreme to another. Bipolar disorderonce known as manic depression, always known as a ferocious mental illness—seems to be showing up in children at an increasing rate, and that has taken a lot of mental-health professionals by surprise. The illness until recently, was thought of as the rare province of luckless adults—the overachieving businessman given to sullen lows and impulsive highs; the underachieving uncle with the mysterious moods and the drinking problem; the tireless supermom who suddenly takes to her room, pulls the shades and weeps in shadows for months at a time. But bipolar disorder isn't nearly so selective. As doctors look deeper into the condition and begin to understand its underlying causes, they are coming to the unsettling conclusion that a large number of teens and children are suffering from it as well. The National Depressive and Manic-Depressive Association gathered in Orlando, Fla., last week for its annual meeting, as doctors and therapists face a daunting task. Although the official tally of Americans suffering from bipolar disorder seems to be holding steady—at about 2.3 million, striking men and women equally—the average age of onset has fallen in a single generation from the early 30s to the late teens. And that number doesn't include kids under 18. Diagnosing the condition at very young ages is new and controversial, but experts estimate that an additional 1 million preteens and children in the U.S. may suffer from the early stages of bipolar disorder. Moreover, when adult bipolars are interviewed, nearly half report that their first manic episode occurred before age 21; 1 in 5 says it occurred in childhood. "We don't have the exact numbers yet," says Dr. Robert Hirschfeld, head of the psychiatry department at the University of Texas in Galveston, "except we know it's there, and it's under diagnosed." If he's right, it's an important warning sign for parents and doctors, since bipolar disorder is not an illness that can be allowed to go untreated. Victims have an alcoholism and drug-abuse rate triple that of the rest of the population and a suicide rate that may approach 20 per cent. They often suffer for a decade before their condition is diagnosed, and for years more before it is properly treated. "If you don't catch it early on," says Dr. Demitri Papolos, research director of the Juvenile Bipolar Research Foundation and co-author of The Bipolar Child (Broadway Books, 1999), "it gets worse, like a tumor." Heaping this torment on an adult is bad enough; loading it on a child is tragic.

- 8. What prompted Nicole to act wildly and jump out of the car?
  - (a) Nicole never wanted to be administered sedatives and therefore, she scuttled off to escape medication.
  - (b) Nicole was mentally retarded and therefore, she had to be kept under a strong vigil.
  - (c) Nicole, out of wild hallucination, had the habit of reckless running, which compelled her mother to chase her.
  - (d) Her hallucinations which put her in an odd state of high energy.
  - (e) None of these.
- 9. Which of the following sentences is true, according to the passage?
  - (a) Patricia's fragmented speech was conceivable.
  - (b) Nicole suspected her friends of envying her gifts.
  - (c) Patricia had telekinetic powers, with which she could change the colors of objects at her will.
  - (d) Torres was suffering from a bipolar disorder.
  - (e) Both (b) and (d).
- 10. Which of the following sentences is incorrect, as laid down in the passage?
  - (a) Doctors took a little time to diagnose Nicole's condition.
  - (b) Bipolar disorder can be treated.
  - (c) Bipolar disorder took every health practitioner by surprise.
  - (d) The increasing rate of bipolar disorder in children has taken mental health professionals by surprise.
  - (e) None of these.
- 11. Bipolar disorder seems to have affected\_\_\_\_\_
  - (a) Children

- (b) Adults
- (c) Both (a) & (b)
- (d) Septuagenarians
- (e) All of (a), (b) and (d) alike.
- 12. Which of the following sentences is incorrect, according to the passage?
  - (a) Bipolar disorder can affect any teenager.
  - (b) Victims of bipolar disorder are prone to alcoholism and drug abuse.
  - (c) Bipolar disorder is just manic depression and not a mental illness.
  - (d) Bipolar disorder is increasingly striking children.
  - (e) None of these.
- 13. Which of the following sentences is incorrect, as per the passage?
  - (a) Nicole was administered alkaloids as first aid, in hospital.
  - (b) It is tough to diagnose bipolar disorder in its nascent stage.
  - (c) Support of parents and relatives is a must to restore a patient's psychic equilibrium.
  - (d) Both (a) and (c).
  - (e) None of these.
- 14. Why is bipolar disorder considered to be serious?
  - (a) Because the victims can change color at will.
  - (b) Because the victims are prone to violent delusions.
  - (c) Because mental health professionals could not conclude as to who could be a victim.
  - (d) As victims of bipolar disorders have a very high rate of alcoholism, drug abuse and suicide, it is a serious mental illness.
  - (e) Both (b) and (d).
- 15. Which of the following sentences can be inferred from the passage?
  - (a) Since bipolar disorder is not considered to be a mental illness by the health practitioners, it should therefore be allowed to go untreated.
  - (b) Doctors are intrigued about the selective criteria of the disease.
  - (c) Impulsive gentlemen are more prone to bipolar disorders.
  - (d) The increasing rate at which bipolar disorder is afflicting younger people is a cause for concern.
  - (e) None of these.

You reach Harvard University's biological anthropology department by climbing five flights of fusty wooden stairs in the Peabody Museum in Cambridge, Mass. It's an old building, haunted by the remnants of long lost tribes and the ghosts of an era when anthropologists thought nothing of collecting the paraphernalia of ancestor worship, not to mention the bones of the ancestors themselves. But it's not bones that have brought me to the Peabody today. I've made the climb to meet Carole Hooven, a young graduate student in biological anthropology, and Richard Wrangham, one of the world's leading experts on chimpanzee behavior. They want to show me a collection of what look like sturdy but quite ordinary sticks. These lengths of wood have a special meaning for Hooven and for science, especially the stick that's shaped like a divining rod with a crook at the end. The last time she saw it, in January 1999 in Uganda's Kibale forest, it was in the hands of a big male chimp called Imoso who was using it to beat mercilessly, a female named Outamba. As a woman, Hooven felt sick at heart at the violence directed at the smaller chimp. But as a scientist, it exhilarated her. She had never read about anything like this. Trembling, she rushed back to camp to report to Wrangham. He listened in silence and then shook her hand. This was a historic moment. While there are a few scattered accounts of chimps wielding sticks against prey or predators, no one before had ever seen a wild animal repeatedly, unambiguously—and with malice and forethought—use a tool as a weapon against its own kind. Until now, devising tools to inflict pain and death seemed to be something only humans did. To be sure, lots of animals use tools. Sea otters employ rocks to crack open shellfish. Crows in New Caledonia extract insects from foliage with twigs—or even bent wire—held in their beaks. Chimps will use sticks and stones for all sorts of purposes, including flailing and throwing them to impress rivals. But for all the theatrics of these so-called threat displays, no one before now had ever seen an ape use a stick to beat another ape. There are sound evolutionary reasons for this. Predators don't need weapons; they are weapons. During internecine wars, chimps will rip one another apart with their teeth and hands. Indeed, a good deal of evolutionary ingenuity has gone into the development of greeting and submission rituals to ward off lethal aggression. Which is why Imoso's crooked club raised so many questions. Where did his behavior come from? Was it something chimps learned from humans, or was it behavior they developed on their own? Whatever the

answer, I knew I had to find a way to get to Kibale. For me, seeing is knowing. I wanted to talk to the human witnesses and, if possible, meet the chimps themselves. When an opportunity to go to East Africa arose in 2001, I called Wrangham, who graciously invited me to stop by Kibale and gave me directions. He might have been guiding me to the local Starbucks: "Get to Fort Portal," he said, as though this was the easiest thing in the world, "and find the cab stand. They all know the way." As it turned out, that was all I needed to know. I arrived in Kibale one evening just as the sun was setting and introduced myself to Kathi Pieta, a graduate student who ran the research station. Over dinner, she told me a bit about the local chimp community. The so-called Kanyawara group consisted of about 50 chimps, including about 10 adult males and 17 adult females. Imoso was the top dog. Young and very aggressive, he was not very popular with the human observers, and his reputation did not improve with the discovery that he was a wife beater. The best description of the first attack comes from Hooven's field notes. Imoso had been trying to get at Outamba's infant Kilimi, but Outamba fended off his efforts. This seemed to enrage Imoso, who began kicking and punching Outamba. To protect her baby, she turned and exposed her back to Imoso's fists. Here is how Hooven described what happened next: "MS [Imoso] first attacks OU [Outamba] with one stick for about 45 seconds, holding it with his right hand, near the middle. She was hit about 5 times ... he beat her hard. (The stick was brought down on her in a somewhat inefficient way ... MS seemed to start with the stick almost parallel to the body and bring it down in a parallel motion. There was a slight angle to his motion, but not the way a human would do it for maximum impact.)" After resting for a minute, Imoso resumed the beating, this time with two sticks, again held toward the middle. Imoso then began hurting Outamba in a number of creative ways, at one point hanging from the branch above her and stamping on her with his feet. To Hooven, the attack seemed interminable. Toward the end, Outamba's daughter Tenkere, 2, rushed to her aid, pounding on Imoso's back with her little fists. But the trouble didn't stop there. Imoso's behavior was observed by other chimps in the community, and he may have inspired imitators. In July 2000, Pieta watched as Imoso's best friend, Johnny, attacked Kilimi, the infant who figured in Imoso's earlier attack. Outamba turned to help Kilimi, whereupon Johnny turned on her. Immediately Outamba became submissive, but Johnny was not to be appeased. He picked up a big stick and started

striking Outamba. "He was definitely trying to hit her," says Pieta. "It wasn't just flailing or accidental." He used an upand-down motion. The whole attack lasted about three minutes. After the chimps moved on, Pieta retrieved the stick, which now resides at Harvard. The next morning, I arose at 4:45 a.m. and joined Pieta and two trackers in search of Johnny, Imoso and the battered Outamba. After a vigorous walk we got to the area of a fruiting ficus tree near where the chimps had built their nests the night before. There were Johnny, Outamba and a number of other chimps. Imoso was not around. When I asked a tracker named Donor why Imoso had attacked Outamba, his answer was straightforward: "Imoso is just a mean chimp." That morning, all was peaceful. The principal drama I observed was the struggle of a 3-yearold female chimp whose arms were too short to grab the broad tree trunk. When she finally found a way into the ficus via a nearby sapling, the trackers applauded. The chimps went about their feeding, and then moved off. As they melted into the brush, I asked Pieta which chimp typically made the plan for the day. As one who was familiar with the jockeying for position in the ape community, she laughed and said, "Johnny thinks he does." In all, the researchers have documented six stick attacks (the most recent seven weeks ago). The behavior is new to science and raises intriguing questions. Why have all the victims been female? And why sticks, why not stones? Imoso could have killed Outamba by slamming her with a heavy rock. That may be precisely why they use sticks, Wrangham and Hooven speculate: to inflict hurt rather than injury. Most of the attacks have been directed at sexually active females. Whereas the males might intend to do real harm to the babies, they have nothing to gain by killing their mates. Brutal as it seems, could it be that the use of sticks signifies restraint? That is one of the mysteries Wrangham and his colleagues are trying to solve, in what they view as a snapshot of the evolutionary process in action. This may be a mirror of how we evolved culturallyby the spread of ideas that moved through our early ancestors in fits and starts. Back in New York City, I experience the familiar sense of relief that comes from returning safely home from an impoverished, diseaseravaged region. Three days later, as I drive my son Alec to nursery school, we hear a radio bulletin announcing that a plane has slammed into the World Trade Center. My son asks, "Is the plane going to be all right, Daddy?" How do I shield a 3-year-old from the enormity of what has just happened? I'm at a loss. I simply say, "I don't think so." We

humans have ways of killing ourselves that chimps could never imagine.

- 16. Which of the following sentences is true, according to the passage?
  - (a) Outamba was physically harassed by Wrangham with sticks.
  - (b) In Uganda's Kibale forest resides Imoso, a big male chimp whose riotic deeds were recorded by Hooven.
  - (c) Kilmi was protected by Outamba against Kathi
  - (d) Imoso's friend Johnny also learnt his behaviour and beat Outamba with a stick.
  - (e) Both (b) and (d).
- 17. Which of the following is incorrect, according to the passage?
  - (a) Imoso resumed beating with two sticks, injuring Outamba.
  - (b) Johnny picked up a big stick to attack Imoso.
  - (c) Imoso's behavior inspired other chimps.
  - (d) Tenkere tried to save Outamba from Imoso.
  - (e) None of these.
- 18. The sticks found at Kibale are preserved at
  - (a) University of Illinois.
  - (b) Anthropological department USA.
  - (c) Library of Richard Wrangham.
  - (d) University of Harvard.
  - (e) Cannot be inferred.
- 19. Which of the following weapons is used by the crows of Caledonia to prey upon insects?
  - (a) Twigs
  - (b) Sticks
  - (c) Stones
  - (d) Foliages
  - (e) Rocks
- 20. Which of the following sentences can be inferred from this passage?
  - (a) Chimpanzees are better equipped to assault tribal members.
  - (b) Chimpanzees are more dangerous in fights than human beings.

- (c) The inspirational values present among chimps are similar to those of human beings.
- (d) A sense of fraternity exists among chimpanzees at the best and worst of times.
- (e) Human beings are much more dangerous than Chimpanzees.
- 21. The passage could be described as
  - (a) Descriptive
  - (b) Topical
  - (c) Analytical
  - (d) Illustrative
  - (e) Hilarious.
- 22. Which of the following is correct, according to the passage?
  - (a) The real cause behind the exhilaration of a scientist named Hooven was the strange behavior of a chimp called Imoso.
  - (b) Violence directed against smaller chimps by Imoso was the main thrust of the scientist's inquisition.
  - (c) Predators themselves, are the manifestation of weapons.
  - (d) Chimpanzees try to hurt each other with the intention of killing.
  - (e) None of these.
- 23. Why did Imoso use only sticks to assault Outamba?
  - (a) Stones could not have been efficiently used.
  - (b) The use of sticks was resorted to inflict hurt & not to kill.
  - (c) Unpredictable behavior of the chimps could not lead the scientist to any conclusion.
  - (d) He did not know how to use other weapons.
  - (e) None of these.
- 24. To which group did all the chimps belong?
  - (a) Local starbucks
  - (b) Kanyawara
  - (c) Kibale
  - (d) Pieta
  - (e) None of these
- 25. Which of these cannot be inferred from the incidents of Kibale?
  - (a) The behaviour of the chimps can be classified as evolutionary.

- (b) It is possible that chimps actually imitate human beings.
- (c) The use of sticks signified restraint.
- (d) All of the above
- (e) None of the above.

#### TEST 10

### Passage 1

Deep in our hearts, we have an intense desire to be loved. Yet, just as deeply, we know no one really understands us, and that we are separated from those around us by differences we don't fully comprehend. The 'Family of Man' we long to share and belong to does not exist. We are just a bunch of desperate, lonely orphans. We would give anything to know how to be lovable. Yet, now more than ever, seemingly caring guides want to help us in our quest. A flurry of books and lectures tells us that change is mandatory for survival. While the recipes for harmony sometimes strike chords in our hearts, it is not enough to read the books or say the phrases. Only if the tools offered are actually used and do indeed make our lives better will we know that the message was correct and we understood. The majority of self-help books agree on one thing: Change is necessary for a more fulfilling life. Some say that the answers lie in justifying fears, anger and emotional suffering by holding someone else-usually a parent or spouse—responsible. Often, another race or some other force at work in our life gets the blame for the mess in which we find ourselves. But one thing is for sure: We are not responsible. 'They' are. How many books, tapes and seminars does it take before the average hurting human being becomes so frustrated that he or she cries, 'The true path must exist because all the wise people say so, but I'll never find it.' Life must have more to offer, something most of us are missing. Otherwise, God has a stranger sense of humour than any comedian working today. Here's the bad news. We can all agree that this thing we call our self, our ego, our personality, is somehow the cause of all our conflicts and negative emotions. This is the cold, hard truth: The self has no idea how to fix itself or it already would have. But no one else can fix our self. We must do it-on our own. You would have probably always suspected this—but no one would prove it because it appears to become a problem with no solution. This realisation is extremely threatening, especially to those who have tried so hard to change in the past and have been

unable to do so. But the good news is that you can learn to fix the self by understanding four basic principles: (1) What the self is; (2) How the self works; (3) How the self got broken; and (4) How you can fix the self. Each of us made our self and only we can fix it. Real changes begin to happen as soon as repair begins and, as you become a better mechanic, the changes will be greater and come easier.

- 1. What is the central idea of the passage?
  - (a) Flurry of books and lectures guide us to become loveable.
  - (b) Our personality is the cause of negative emotions and conflicts and knowing how to fix it is crucial.
  - (c) Change is mandatory for survival.
  - (d) The root cause for all our troubles are 'others'.
  - (e) None of these.
- 2. For what does the author bestow the responsibility to other people?
  - (a) For justifying human sufferings.
  - (b) For bringing us into intricate situations.
  - (c) For not showing the true path.
  - (d) For inflicting our 'self' with fears, anger and emotional suffering.
  - (e) None of these.
- 3. Who can fix our self?
  - (a) No one
  - (b) We
  - (c) God
  - (d) Others
  - (e) None of these
- 4. What, according to the author is required to make our life better?
  - (a) Changing ourselves as per the dictates of time.
  - (b) Renouncing our negative emotions.
  - (c) Actually using the tools offered to us in self-help books, tapes and seminars.
  - (d) Immunising ourselves against negative emotions.
  - (e) None of these.
- 5. What is the cause behind all our conflicts and negative emotions?
  - (a) Our self
  - (b) Our personality
  - (c) Our ego
  - (d) All of the above
  - (e) Others

- 6. Of what use are tapes, books & seminars for the author?
  - (a) They are useless as they are meant to detract us from our original path.
  - (b) The true path can be shown only by these media.
  - (c) They serve as change agents in our society.
  - (d) They are of use only to the extent that their principles are put to use by us.
  - (e) None of these.
- 7. Why does the author seem to insist on self-help books?
  - (a) They can bring change in our lives.
  - (b) They justify tears, anger & emotional sufferings.
  - (c) They help us to harmonize the chords of our heart.
  - (d) They give us the tools for change—provided we use them.
  - (e) None of these.
- 8. What, according to the author are the inhibiting factors in the way of leading a good life?
  - (a) Self help books
  - (b) Our ego and our personality
  - (c) Conflicts and negative emotions
  - (d) Selfishness
  - (e) Cannot be inferred

## Passage 2

Scandalised by how Arthur Andersen could destroy thousands of e-mails and paper documents related to its audit of Enron and the energy major's more than unconventional accounting methods? Don't know whether to believe it was just a rogue partner acting on his own accord, or whether the lead partner on the Enron account, David Duncan, was just following instructions—a person close to Duncan told *The Wall Street Journal* that, on October 12, an Andersen lawyer advised the Enron auditors to follow company procedure that allows for the disposal of many documents.

Well, it's true that past practices in themselves are no indication that they're still being followed, but it would be instructive to go back, as I did, and read Mark Stevens' *The Big Six*, which is one of the best "audits" of the shenanigans of the world's top audit firms. Stevens' book is replete with examples of how the Big Six have fudged, obfuscated and kept their eyes wide shut in order to please clients. Oh yes,

as in the Andersen-Enron case, there's even an example of shredding of possibly vital files. Perhaps that's a good place to begin. It concerns Touche Ross (which merged with Deloitte Haskins to become Deloitte & Touche later), and its audit of the Beverly Hills Savings & Loan, BHSL-the sudden collapse of various S&Ls, certified as financially sound, was a big scandal in the US in the late '80s.

Anyway, while reviewing the business of a former vice president of the BHSL, Touche was told all the files "were contained in eight cardboard boxes and were (BHSL told Touche)... the complete set of files... except for one box which was accidentally shredded." Touche was initially sceptical about the shredding, but clearly got over these doubts quickly enough since it gave BHSL the all-clear. Later, when Touche was examined by the US Congress, Congressman Wyden was scathingly sarcastic: "Is the shredding machine at Beverly Hills big enough to shred an entire box of documents all at once, or do they have to feed the documents page by page?"

It gets better. When it became clear that BHSL was having a major problem disposing of high-cost property investments, Touche simply decided to change the bookkeeping, and instead of showing the apartments as investments, decided to show them as "equity-participation loans". And once these were shown as loans, BHSL showed it was getting interest and fee income from them. Problem solved, except there was no interest or fee that was actually received. Congressman Dingell later quizzed Touche on the amount of "equity" in these "equity-participation loans". What was the amount of the equity, the Congressman asked? I don't know, replied the Touche partner. And they were the auditors.

Stevens' most evocative story, of course, is the one about ZZZZ Best, or the carpet-cleaning business begun by Barry J. Minkow. Having built up a respectable business, Minkow decided to go public and, in order to get people interested in buying into his equity, boasted that his firm was in the lucrative insurance-restoration business—that is, he got restoration contracts from insurance firms. Minkow hired Ernst & Whinney (that later merged with Arthur Young to become Ernst & Young) to audit his firm.

Naturally, one of the first things Ernst did was to audit the insurance business. Minkow, to be fair to Ernst, cheated them. He hired an office in Sacramento, bribed the security guard to pretend he was familiar with ZZZZ's staff, and forced Ernst to do an inspection on a Sunday when other

offices were closed. Duped by an impostor, Ernst said Minkow's business was fine, and repeated the inspections in various other "facilities". In fact, when the House Committee on Oversight began investigations, Ernst argued they couldn't be blamed for not being able to detect such an elaborate fraud.

Fair enough, but Ernst didn't even do basic checks like going to the buildings department in various cities to find out if the buildings that ZZZZ was helping "restore" had ever had a fire or the kind of water leakages ZZZZ claimed they'd had. Ernst had also signed a confidentiality letter preventing it from disclosing the location of the buildings ZZZZ was restoring to any third party. But, and this is critical, it also said it would "not make any follow-up telephone calls to any contractors, insurance companies, the building owners... involved in the restoration project". Congressman Ron Wyden asked Ernst how it proposed to do an independent audit with such restrictions on it? Ernst's behaviour gets curiouser. It appears someone told Ernst the "restoration" job it had inspected in Sacramento was a fake, but even then the audit firm didn't feel the need to revisit the Sacramento site. The charge about the restoration being fake, it appears, was withdrawn, but Ernst itself found evidence that ZZZZ had made payments to the individual who made and then withdrew the complaint!

While you're following every twist and riveting turn in the Andersen saga, be sure to compare them with those catalogued by Stevens. It promises to be both an interesting and frightening exercise.

- 9. It can be inferred from the passage that
  - (a) Ernst conducted an independent audit under the influence of bribe.
  - (b) Ernst attempted to conduct an independent and thorough audit but was prevented from doing so.
  - (c) Ernst's audit lacked professionalism.
  - (d) Ernst's audit was a complete fraud.
  - (e) Both c and d.
- 10. According to the passage, all of the following are not true except-
  - (a) Arthur Andersen destroyed Enron's document on it's own accord.
  - (b) Andersen and Enron were in close complicity in destroying Enron's documents.
  - (c) Andersen was against the concept of selective destruction of documents.

- (d) Andersen was not averse to the practice of selective disposal of documents.
- (e) Destroying documents is a standard audit practise.
- 11. The author of the book The Big Six
  - (a) has given the author the requisite insight to look at the various unprofessional modus operandi adopted by audit firms.
  - (b) has described the different frauds associated with the different methods of audits adopted by six big audit firms.
  - (c) has made a critical analysis of some of the top audit firms' bad practices.
  - (d) declares Andersen's audit as the best.
  - (e) has written a book on audit firms best practises.
- 12. According to the author, which of the following could have been the main cause behind Arthur Andersen's dubious shredding of vital files in the case of Enron?
  - I. A lead partner acting on instructions.
  - II. Complicity between Arthur Andersen, the audit firm, and Enron.
  - III. A rogue partner acting on his own.
  - (a) I & II only
  - (b) All three
  - (c) I & III only
  - (d) III only
  - (e) II and III only.
- 13. According to the passage, big audit firms
  - (a) were often misled and cheated by their clients
  - (b) used business practices that were aimed to satisfy their clients.
  - (c) were ignorant about the motives of their clients.
  - (d) were innocent victims of corporate fraud.
  - (e) None of these.

Iran's officials have reacted angrily to American accusations that their government is developing weapons of mass destruction and sponsoring terrorism. But President George Bush and his colleagues show no sign of backing down, raising questions about the impact their verbal onslaught will have in Iran itself. Khamenei thinks Bush is thirsty for blood.

America's leaders have hardly been mincing their words since President George Bush, in his state-of-the-union message last week, listed Iran, Iraq and North Korea as an "axis of evil". In the case of Iran, this seems an odd time for America to be issuing such ringing denunciations: Iranian acquiescence, if not active co-operation, has been important in the war in Afghanistan; and reformist-minded Iranian leaders are struggling hard to end their country's isolation and to improve relations with the West. But American officials have been quick to deny that Mr Bush's onslaught was intended for a domestic American audience alone. He wants, they claim, to be heard loud and clear in Tehran.

Certainly that was the impression given over the weekend, as Mr Bush's colleagues elaborated the insults and charges levelled at the evil threesome. Condoleeza Rice, the national security adviser, said they "are a clear and present threat to us and to all the responsible and civilised world". Colin Powell, the secretary of state, said they act in ways that are "inconsistent with the expectations of the 21st century".

Iran, in common with the other two countries on Mr Bush's list, is accused of trying to develop weapons of mass destruction, and of sponsoring terrorism elsewherenotably, in Iran's case, through the activities of the Hizbollah militias in Lebanon. There is another item, too, on the chargesheet against Iran: that it is now playing an unhelpful role in destabilising Afghanistan, and has even offered shelter to fleeing al-Qaeda terrorists.

Iran has dismissed the accusations as evidence that Mr Bush is, in the words of Ayatollah Ali Khamenei, Iran's spiritual leader, "thirsty for human blood". But there is little doubt that Iran has dabbled in the development of chemical, biological and nuclear weapons, and in the missile technologies that might enable it to deliver them.

Although Iran signed the Chemical Weapons Convention (CWC) in 1997, it is believed to have held stocks of chemical weapons and maintained production facilities ever since its war with Iraq in the 1980s. As for germ warfare, last November, at an acrimonious review of the Biological Weapons Convention, America publicly accused Iran (alongside Iraq and North Korea) of having illegally produced biological agents and turned them into weapons.

But the greatest concern is over Iran's nuclear and missile ambitions. With Russian help, it is building civilian nuclearpower reactors that western intelligence officials fear could mask a clandestine weapons programme. And it is said to show a keen interest in the uranium-enrichment technology required for weapons-making.

Iran's officials have pointed out that their declared nuclear facilities are all monitored and inspected by the International Atomic Energy Agency, as required by the 1970 nuclear Non-Proliferation Treaty (NPT). But like many countries, it has yet to submit to new checks that can pick up clandestine activity more effectively. The more Iran learns from its Russian helpers, the greater the danger that it could some day attempt a sudden break-out from the NPT, which requires only three months' notice of withdrawal. On February 5th, however, Admiral Ali Shamkhani, the defence minister, was quoted in a newspaper interview as saying Iran would never seek nuclear weapons "for any reason". He also warned Israel against attacking Iran's nuclear power plants, threatening an "unimaginable" response. Israeli ministers have denied having any such intention.

- 14. It can be inferred from the contents of the passage, about President Bush's message that:
  - (a) It was made due to the fact that America considers Iran an evil state.
  - (b) It was, most probably, aimed to placate American Public opinion.
  - (c) It was issued since America wants to threaten Iran.
  - (d) It was in response to the fact that Iran is trying hard to improve her relations with the US.
  - (e) He wanted to connect to the Iranian public.
- 15. According to the passage, in declaring that "Iran is a clear and present threat to America and to all the responsible and civilized world",
  - (a) Rice was totally justified.
  - (b) Rice was rational.
  - (c) Rice was arbitrary.
  - (d) Rice was self-contradictory.
  - (e) Rice was incorrect.
- 16 According to the passage, which of the following programmes of Iran is the main concern of America?
  - (I) Chemical Weapon Programme (CWP).
  - (II) Biological Weapon Programme (BWP).
  - (III) Nuclear Power Programme (NPP).
  - (a) Only II
  - (b) Only I & III
  - (c) Only III

- (d) I, II and III
- (e) Only II & III.
- 17. According to the passage, it can be definitely said that
  - (a) Iran is developing weapons of mass destruction.
  - (b) Iran is sponsoring terrorism.
  - (c) Iran is giving refuge to Al-Qaeda terrorists.
  - (d) Iran is a threat to all the responsible and civilized world.
  - (e) Iran is a terrorist state.
- 18. According to the passage, all of the following are not true except:
  - (a) Iran is not a signatory to the NPT.
  - (b) Iran has refused to allow new checks that can pick up clandestine activities more effectively.
  - (c) Iran would break out from NPT after three months.
  - (d) Iran's nuclear facilities are within the jurisdiction of IAEA.
  - (e) Iran definitely has a clandestine nuclear weapons program.

# Passage 4

Professor Gloria Gutman has the kind of credentials that should guarantee a long, fruitful stay at the peak of her profession. She developed and directs the highly regarded Gerontology Research Centre at Simon Fraser University in Vancouver. She's written or edited 20 books and more than 100 scholarly articles on such issues as housing for the elderly, dementia and long-term care. Her work is recognized beyond Canada's borders—she's president of the International Association of Gerontology, representing organizations in 63 countries.

But last summer, she faced a problem. On July 17 she turned 65. At Simon Fraser, as at many institutions and workplaces across Canada, that's the age of mandatory retirement. Happy birthday! Here's your watch, there's the door. One day you're 64, an internationally respected member of the faculty. The next, you're too old to be employed as an expert on aging.

How weird! "I find it odious," Gutman says. "At whatever age we are, we should be judged on the basis of our competency."

In her view, Canada is tossing away a valuable part of its labour force. "It's insane when you figure what life expectancy is today," she says. "And look at demographics—fertility rates are dropping. everybody to work who can work."

Increasingly, opinion leaders share that view. Mandatory retirement, once a hallmark of a prosperous and civilized society, now seems doomed by demographics. With too many old people and too few young, something's got to give. Even Canada's 66-year-old Prime Minister wants an end to mandatory retirement. It's a notion, however, that sends chills down the aching backs of some labourers bent over factory assembly lines, or office workers trapped in cubicle land, counting the months until their pension kicks in.

Others see lingering longer in the workforce as an economic imperative. Forced retirement and early buyouts make no sense for employers in the face of a looming labour shortage. And as for workers, recent polls show mounting public doubts that their government or company pensions will be there when they retire. For that matter, as life expectancy stretches into the 80s, maybe 60 or 65 is too young to collect a full pension. The United States and several cash-strapped European countries now think so.

For some critics, forced retirement is simply unfair: Why is age the last bastion of socially accepted discrimination? "Nobody has a shelf life" declares the Ontario Human Rights Commission, which set the agenda in that province with a 2001 report, calling for an amendment to the rights code to make mandatory retirement illegal.

Chief Commissioner Keith Norton says society has changed since 1990, when the Supreme Court of Canada upheld mandatory retirement as a justifiable limit on constitutional rights. Among the arguments considered by the judges—themselves with a mandatory retirement age of 75—was that older workers blocked the young from the workforce. Most economists dismiss that as invalid, saying the economy creates as many jobs as there are workers to fill them, as it did when women entered the workforce.

In any case, young people will soon be in short supply as the population ages. Ontario alone will have 2-1/2 million people 65 or older by 2021, two thirds more than in 1998. Careers and families are starting later in life, why not an older age for retirement? Norton, 64, is adamant the public wants "the dignity of planning their own retirement according to their needs and resources."

Organized labour is not inclined to agree. Many union leaders see the issue as an assault on hard-won collective agreements and pensions—an attempt to roll back progress to the worst days of the Industrial Revolution, an era in which you retired when your heart stopped beating.

Wayne Samuelson, 53, president of the Ontario Federation of Labour and a former worker at a Kitchener tire plant, remembers rubber workers striking and winning the right to retire after 30 years. He doesn't want such advances eroded. The dubious freedom to work longer to make up pension or benefit shortfalls is a "cop-out," he says. What next, he asks, a 60-hour workweek?

The "emotional appeal" of a 64-year-old who wants to keep working is hard for the union to counter, he concedes, but he doubts the public appreciates the sweeping ramifications of the issue. If age isn't the criterion for leaving the workforce, performance will be. Older workers, with higher insurance and disability costs, will be fired at the first dip in productivity—an uglier end to one's working life, he warns. "You'd have to be living on Mars to not expect that employers will find ways to get rid of people."

Mandatory retirement is already banned in Australia, New Zealand and, for a generation now, in the United States. The Americans have taken the next logical step—they're raising the eligibility age for full retirement benefits and Medicare to 67 from 65. Even that may not be enough to spare an aging America from disaster, warns U.S. Federal Reserve Board chairman Alan Greenspan, 78.

The leading edge of the baby boom starts drawing retirement benefits in 2008, a hit the U.S. economy can ill afford, Greenspan told a Congressional committee last year. He advocates cuts to inflation indexing in advance of the boomer wave. "This is a much larger problem than we can handle," he says.

Canada faces a similar demographic bulge and some of the same economic challenges, says Jonathan Kesselman, 58, a professor of public policy at Simon Fraser University. Currently, there are four people working per senior. By midcentury, there will be just two workers per senior, a shift that will have a huge impact on the economy and labour supply.

"It makes little sense that average retirement ages have been declining at the same time that lifespans have been rising as the health status of older persons improves, and the physical demands of most jobs are falling," he says. "A person entering the workforce at age 22 and retiring at 61 is spending just 39 years at work, barely half a lifetime."

The Canada Pension Plan appears sound for at least the next 75 years, due to a substantial jump in contribution rates, but Kesselman questions whether a heavily retired Canada can afford such tax-funded benefits as old-age security and health care. He wants politicians to screw up the courage to phase in an increase in the age for full pension benefits as the United States has done.

Raising the pensionable age may not be on the political agenda yet. But offering the choice of an extended working life certainly is. Age-based retirement is already banned to varying degrees in all three northern territories and in Manitoba, Quebec, Alberta and Prince Edward Island. In 2003, the government of Ontario stated its intention to end mandatory retirement.

Age 65, in fact, is increasingly irrelevant as a retirement date. Half of workers are now off the clock before age 61. At the other end of the scale, Statistics Canada estimates 305,000 people 65 and older were employed in 2001—almost a 20 per cent increase in five years.

Patt Noga, executive director of the 50+ Job Bank in Winnipeg, sees such people every day. Some have collected buyouts only to seek work when the money runs low or when they start climbing the walls. "A lot of them have skills they still want to use. They're proud of them," she says.

A case in point is her 63-year-old husband, Brian Noga. By day, he's an accountant for a Manitoba regulatory agency. By night, he's studying to become a certified general accountant. "I'm probably going to have to work until I die," he says with remarkable good cheer.

Part of the reason is financial. Like many Canadians, he hasn't saved enough to live on, a situation worsened when his technology stocks took a plunge. Then, too, he sees retired friends for whom the high point of the day is reading the newspaper. Working keeps you sharp, he says. "If you just sit back and vegetate, everything starts to fall apart, your mind and your focus. I don't want that to happen."

Boomers, having never acted their age, aren't likely to start now. If age 65 becomes the new 50, does that make work the new retirement? Not likely. A generation notoriously averse to heavy lifting is likely to define retirement on its own terms. Optional retirement, freed of the arbitrary restraints of age, is apt to be taken in installments: a bit of play, perhaps a spot of do-goodery-and just enough work to keep the economy from collapsing upon their frantically toiling children.

- 19. What according to the passage is a socially accepted discrimination?
  - (a) Sex
  - (b) Literacy
  - (c) Age
  - (d) Occupation
  - (e) Productivity.

- 20. What would be akin to living on Mars?
  - (a) Having no fixed retirement age.
  - (b) Being able to retire when you feel like.
  - (c) Expecting your employers to be generous paymasters.
  - (d) Expecting your employers not to find excuses to fire you.
  - (e) None of these.
- 21. The quotation "it makes little sense that average retirement ages have been declining at the same time that life spans have been rising as the health status of older person improves, and the physical demands of most jobs are falling," is most likely to concur with which of the following options?
  - (a) Life expectancy and health of older people is better since they are working less and retiring early.
  - (b) Since people live longer and are healthy, they should work harder than they used to.
  - (c) The fixing of retirement age makes no sense since people have easier work environment and they remain healthy even at an older age.
  - (d) Early retirement is beneficial and it does not make sense for people who live longer to retire later.
  - (e) Retirement age should be abolished.
- 22. What according to the passage is the meaning of the word "gerontology"?
  - (a) The study of retirement ages.
  - (b) The study of retirement benefits.
  - (c) The study of effects of early retirement.
  - (d) The study of old age.
  - (e) The study of elder workforce.
- 23. What does Gutman find hateful?
  - (a) Judging people on the basis of their age.
  - (b) Judging people on the basis of their knowledge.
  - (c) Judging people on the basis of their skills.
  - (d) Two of the above.
  - (e) Employers right to fire their workers.
- 24. What according to Samuelson is classified as a "dubious freedom"?
  - (a) To earn as much as you work.
  - (b) To take off times and have flexible schedules.
  - (c) To be able to work past the retirement age.
  - (d) To be able to work young and retire young.
  - (e) To let productive capacity determine your wages & remuneration.

Answer K	EY				Passage 4	-		
Test I					16. (b) 17. (a	a) 18.	(c) 19. (a)	20. (b)
Passage 1					21. (b)			
1. (a)	2. (d)	3. (d)	4. (c)	5. (c)	Passage 5			
Passage 2					22. (a) 23. (l	b) 24.	(b) 25. (b)	26. (b)
6. (d)	7. (b)	8. (c)	9. (c)	10. (a)	Test IV			
Passage 3					Passage 1			
11. (c)	12. (d)	13. (d)	14. (a)	15. (d)	1. (b) 2. (d	d) 3.	(b) 4. (d)	5. (a)
Passage 4					6. (a)			
16. (b)	17. (c)	18. (b)	19. (a)	20. (b)	Passage 2	L) 0	(h) 10 (a)	11 (%)
21. (b)					7. (a) 8. (l  Passage 3	0) 9.	(b) 10. (c)	11. (b)
Passage 5					12. (d) 13. (e	a) 14	(e) 15. (a)	16. (d)
22. (e)	23. (b)	24. (c)	25. (b)	26. (a)	Passage 4	<i>,</i> 11.	(6) 13. (4)	10. (u)
Test II					17. (c) 18. (a	a) 19.	(b) 20. (a)	21. (a)
Passage 1					22. (c)	,	, , , , , , ,	` '
1. (d)	2. (d)	3. (e)	4. (d)	5. (a)	Passage 5			
Passage 2					23. (b) 24. (l	b) 25.	(b) 26. (c)	27. (a)
6. (e)	7. (c)	8. (b)	9. (a)	10. (b)	Test V			
Passage 3					Passage 1			
11. (c)	12. (a)	13. (b)	14. (c)	15. (c)	1. (c) 2. (d	2) 3.	(a) 4. (c)	5. (c)
16. (c)					6. (c)			
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22. (e)					Passage 3			
Passage 5					13. (c) 14. (d	e) 15.	(a) 16. (d)	17. (b)
23. (d)	24. (d)	25. (a)	26. (a)	27. (b)	Passage 4	,	()	( )
Test III					18. (b) 19. (l	b) 20.	(d)	
Passage 1					Passage 5			
1. (c)	2. (c)	3. (c)	4. (e)	5. (b)	21. (d) 22. (d)	23.	(c) 24. (d)	25. (d)
Passage 2					26. (d)			
6. (d)	7. (d)	8. (a)	9. (d)		Test VI			
Passage 3					Passage 1			
10. (a)	11. (c)	12. (c)	13. (b)	14. (b)	1. (a) 2. (a	a) 3.	(a) 4. (b)	5. (c)
15. (e)					6. (a) 7. (l	b)		

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Passage 2					Passage 3
8. (e)	9. (d)	10. (e)	11. (b)	12. (e)	13. (c) 14. (b) 15. (b) 16. (e)
13. (d)	14. (a)	15. (a)	16. (b)		Passage 4
Passage 3					17. (d) 18. (d) 19. (e) 20. (c) 21. (c)
17. (c)	18. (c)	19. (c)	20. (c)	21. (c)	Passage 5
22. (d)	23. (b)	24. (e)	25. (d)	26. (a)	22. (b) 23. (e) 24. (e) 25. (d) 26. (a)
Passage 4					27. (b)
27. (e)	28. (e)	29. (a)	30. (e)	31. (d)	Test IX
Test VII					Passage 1
Passage 1					1. (c) 2. (b) 3. (a) 4. (e) 5. (b)
1. (a)	2. (c)	3. (a)	4. (a)	5. (c)	6. (b) 7. (c)
6. (c)					Passage 2
Passage 2					8. (d) 9. (b) 10. (c) 11. (c) 12. (c)
7. (b)	8. (a)	9. (e)	10. (a)	11. (a)	13. (a) 14. (d) 15. (d)
Passage 3					Passage 3
12. (b)	13. (e)	14. (a)	15. (a)	16. (c)	16. (b) 17. (b) 18. (d) 19. (a) 20. (e)
Passage 4					21. (d) 22. (c) 23. (b) 24. (e) 25. (d)
17. (b)	18. (d)	19. (d)	20. (c)	21. (a)	Test X
Passage 5					Passage 1
22. (c)	23. (d)	24. (e)	25. (a)	26. (b)	1. (b) 2. (e) 3. (b) 4. (c) 5. (d)
Test VIII					6. (d) 7. (d) 8. (c)
Passage 1					Passage 2
1. (c)	2. (e)	3. (d)	4. (b)	5. (d)	9. (e) 10. (d) 11. (c) 12. (b) 13. (b)
Passage 2	2. (6)	3. (u)	(6)	3. ( <b>u</b> )	Passage 3
	7 (b)	9 (a)	0 (a)	10 (4)	14. (b) 15. (c) 16. (c) 17. (a) 18. (b)
6. (e) 11. (a)	7. (b) 12. (c)	8. (c)	9. (a)	10. (d)	Passage 4
11. (u)	12. (0)				19. (c) 20. (d) 21. (c) 22. (d) 23. (a)
					24. (c)