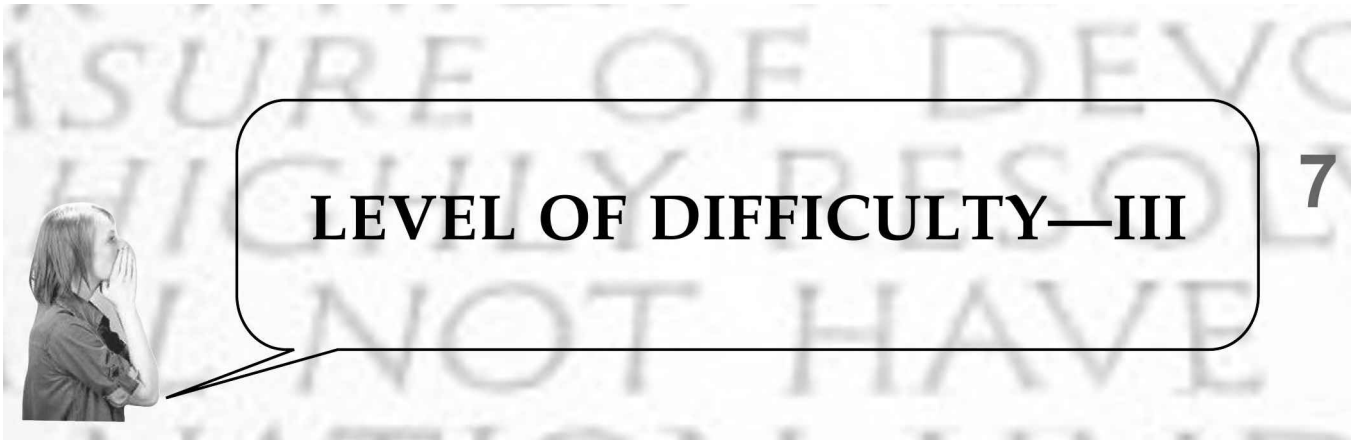

LEVEL OF DIFFICULTY—III

7

TEST I

Passage 1

Nitro-glycerine has long been famous for its relief of angina pectoris attacks but ruled out for heart attacks on the theory that it harmfully lowers blood pressure and increases heart rate. A heart attack, unlike an angina attack, always involves some localized, fairly rapid heart muscle death, or myocardial infraction. This acute emergency happens when the arterio-sclerotic occlusive process in one of the coronary arterial branches culminates so suddenly and completely that the local myocardium—the muscle area that was fed by the occluded coronary—stops contracting and dies over a period of hours, to be replaced over a period of weeks by a scar, or "healed infarct." In 1974, in experiments with dogs, it was discovered that administration of nitro-glycerine during the acute stage of myocardial infarction instantly reduced the extent of myocardial injury, provided that the dogs' heart rate and blood pressure were maintained in the normal range. Soon after, scientists made a preliminary information of the clinical applicability of nitro-glycerin in acute heart attack in human patients. Five of twelve human subjects developed some degree of congestive heart failure. Curiously, the nitro-glycerine alone was enough to reduce the magnitude of injury in these five patients, but the seven patients whose heart attacks were not complicated by any congestive heart failure, were not consistently helped by the nitro-glycerin until another drug, phenylephrine, was added to abolish the nitro-glycerin-induced drop in blood pressure. One explanation for this is that the flex responses in heart-rate, mediated through the autonomic nervous system, are so blunted in congestive heart failure that a fall in blood pressure prompts less of the cardiac acceleration which otherwise worsens the damage of acute myocardial infarction.

It appears that the size of the infarct that would otherwise result from a coronary occlusion might greatly be reduced, and vitally needed heart muscle thus saved, by the actions of certain drugs and other measures taken during the acute phase of the heart attack. This is because the size of the myocardial infarct is not really determined at the moment of the coronary occlusion as previously thought. The fate of the stricken myocardial segment remains largely undetermined, hanging on the balance of myocardial oxygen supply and demand, which can be favourably influenced for many hours after the coronary occlusion. So it is possible to reduce the myocardial ischemic injury during acute human heart attacks by means of nitro-glycerin, either alone or in combination with phenylephrine. Other drugs are also being tested to reduce myocardial infarct size, particularly drugs presumed to affect myocardial oxygen supply and demand, including not only vessel dilators such as nitro-glycerin but also antihypertensives, which block the sympathetic nerve reflexes that increase heart rate and work in response to exertion and stress. Such measures are still experimental, and there is no proof of benefit with regard to the 65 great complications of heart attack such as cardiogenic shock, angina, or mortality. But the drugs for reducing infarct size now hold center stage in experimental frameworks.

1. According to the passage, the primary difference between a heart attack and an angina attack is that a heart attack
   (a) involves an acceleration of the heartbeat.
   (b) cannot be treated with nitro-glycerin.
   (c) takes place within a relatively short period of time and always results in a damage to the muscle tissue of the heart.
   (d) All of the above.
   (e) Both b and c.
2. In the study referred to in the passage, the patients who developed congestive heart failure did not experience cardiac acceleration because:

(a) the nitro-glycerin was not administered soon enough after the onset of the heart attack.
(b) the severity of the heart attack blocked the autonomic response to the nitro-glycerin induced drop in blood pressure.
(c) administering phenylephrine mitigated the severity of the drop in blood pressure caused by nitro-glycerin.
(d) phenylephrine abolished the drop in blood pressure caused by nitro-glycerin.
(e) doctors were able to maintain blood pressure, and thus indirectly, the pulse rate, in those patients.

3. The passage provides information to answer all of the following questions EXCEPT:
(a) What are some of the physiological manifestations of a heart attack?
(b) What determines the size of a myocardial infarct following a heart attack?
(c) What effect does nitro-glycerin have when administered to a patient experiencing a heart attack?
(d) What are the most important after effects of heart attacks?
(e) None of these.

4. It can be inferred from the passage that nitro-glycerine is of value in treating heart-attacks because it
(a) lowers the blood pressure.
(b) stimulates the healing of an infarct.
(c) causes cardiac acceleration.
(d) dilates blood vessels.
(e) increases the myocardial infart.

5. The author's attitude towards the use of nitro-glycerin and other drugs to treat heart attack can best be described as one of
(a) Concern
(b) Resignation
(c) Anxiety
(d) Optimism
(e) Pessimism.

6. It can be inferred that the phenylephrine is administered in conjunction with nitro-glycerin during heart attack in order
(a) to prevent cardiac acceleration caused by a drop in blood pressure.
(b) to block sympathetic nerve reflexes that increase the pulse rate.
(c) To blunt the autonomic nervous system which accelerates the pulse rate.
(d) To reduce the size of a myocardial infarct by increasing oxygen supply.
(e) To increase the blood pressure.

Passage 2

Hopes of a significant appreciation of the euro have faded yet again, as the dollar surges amid talk of a speedy recovery in the American economy. Does the weakness of the single European currency matter?

"HOW do they know?" asked Dorothy Parker when told that the former American president Calvin Coolidge, famous for his inactivity, had died. It is a bit like that with the euro: when people start fretting about its weakness, it is tempting to point out that it was ever thus. Since January 1999, when the European single currency came into being, it has consistently under-performed expectations about its value in relation to the American dollar and, to a lesser extent, the Japanese yen. So the latest bout of euro-anxiety prompts two questions. What's new this time? And does euro weakness matter anyway?

It is difficult not to sympathise with those who wonder what the latest fuss is about. It is true that since the beginning of the year the euro, has once again seen its value against the dollar fall. It is also true that this has been a disappointment to those who see the currency's external value as somehow symbolic of Europe's economic strength and who had hoped that the introduction of euro notes and coins on January 1st would somehow transform the new currency's fortunes. But as often happens with discussions about exchange rates, too much emphasis can be placed on short-term fluctuations.

Such debates are also prone to exaggeration. The euro has lost about 3-4 per cent of its value against the dollar in the past month. It may yet lose more. But so far, it remains above the lowest point it has reached in the past six months; and it is still significantly higher than its all-time low, reached in October 2000. And while in the short term, it would be a mistake to attribute too much economic wisdom to the foreign-exchange markets, it is not difficult to find reasonable expectations for the euro's decline.

Foremost is the judgment of many economists that America is now poised for recovery from recession and, if the

trends seen in the latest data are confirmed, to do so more quickly than many people had anticipated. Of all the world's rich economies, America has persistently proved the most dynamic and resilient; and nothing that has happened during the current global downturn seems to contradict that. It is, of course, possible that the optimists are taking too rosy a view of American prospects: although the Federal Reserve decided against another cut in interest rates last week, it sounded a note of caution, talking about the continuing risk of economic weakness.

But the euro-area's performance has given much greater cause for concern. Most economists reckon Germany—the world's third-largest economy, and the euro zone's biggest—is in recession. The German downturn, moreover, came after a relatively brief and half-hearted upturn, especially when compared with the longest peacetime expansion in American history. The euro-area's lacklustre economic performance has disappointed many of those who had detected signs of a stronger commitment to reform, especially in Europe's traditionally rigid labour markets. In the event, reform has been slow to materialise and most euro-area economies have a long way to go before their labour markets are as flexible as those in America, or even Britain. Plans to dismantle state-run monopolies and to open Europe's markets to greater competition are also taking much longer to push through than previously seemed likely.

Seen in this light, the relative weakness of the euro is helpful for the euro-zone economies. The lower the value of the euro, the more competitive are euro-area exports to the rest of the world. Indeed, some big American manufacturers have recently begun to complain about the strength of the dollar, both in relation to the euro and to the yen: they are finding it harder to compete in world markets.

Indeed, it is possible to argue that the euro's continuing weakness is at least partly an inevitable reflection of the dollar's strength. The American currency has consistently defied predictions of impending collapse. It remains the currency of choice in times of trouble, as its sharp appreciation since the war on terror that began after the events of September 11th has shown.

The good news for European exporters is that the American government shows no sign of seeking to push the dollar down. There is great scepticism in Washington about the idea of exchange-rate co-ordination (a tactic much favoured in the 1980s, for example). Paul O'Neill, the treasury secretary, said recently that he had no sympathy for American manufacturers who lobby against a strong dollar. Good companies, he argued, do not live or die on exchange rates.

Because the dollar is still the world's principal reserve currency—there are large holdings of dollars outside America—any pronounced and prolonged decline in its value ultimately depends on there being attractive alternative assets for people to hold. Many Europeans—or at least European leaders—had hoped that the euro would assume this role. For some, it was a matter of pride, which the new currency's weakness has bruised. In fact, the figures show an increasing number of private-sector bond issues are denominated in euros, for example.

7. According to the passage, which of the following about the performance of Euro is not true?
   (a) Euro has under-performed against the Dollar and Yen both.
   (b) Euro performed very well before Jan. 1999.
   (c) There is little hope of a significant recovery of the Euro in the near future.
   (d) There was a definite hope of a significant appreciation of the Euro.
   (e) It needs to be seen whether the value of the Euro matters at all.
8. It can be inferred from the passage that
   (I) Some people see Euro's external value as a symbol of Europe's economic strength.
   (II) Some people hoped that the introduction of Euro notes and coins would transform the future of Europe.
   (III) The hopes of Euro's gaining strength against the dollar crashed.
   (a) Only III
   (b) Only I and II
   (c) Only I and III
   (d) I, II and III
   (e) Only I
9. According to the passage, does Euro's weakness matter anyway?
   (a) Definitely, yes
   (b) Probably, yes
   (c) Definitely, not
   (d) Probably, not
   (e) Nothing can be inferred.

10. From the passage, all of the following cannot be inferred except
    (a) America is all set to come out from the current downturn
    (b) The current global downturn has destroyed the confidence of people in American economy.
    (c) The current global downturn contradicts the popular belief about the resilience of American economy.
    (d) The judgment of many economists would most likely not be vindicated.
    (e) The Euro is crucial for the world economy.
11. According to the passage, the term "Euro-area's" stands for
    (a) European countries.
    (b) Area of Europe.
    (c) Euro's area of circulation.
    (d) Members of the European Union.
    (e) Germany & Britain.

Passage 3

We can see because the eye forms a small inverted image of the outside world in the light-sensitive cells of the retina. However, the retinal image is flat, like a photograph or TV screen. How do we see the three dimensions? The two eyes look at the world from slightly different vantage points, and the difference or disparity between the images is used by the brain to see the third dimension. The generally accepted physiological theory of disparity-sensing is that the cells in the brain are stimulated by light falling on slightly different parts of the left and right eyes, making them most responsive to objects at a particular distance. A population of slide cells, each tuned to a different disparity, could in principle provide sufficient information to recover the third dimension. Such cells have been found in monkeys, and models of stereoscopic vision based on their properties have been successfully simulated by computers.

A potential problem arose first from some observation by the German physicists Carl van Pulfrich, who reported that if a person viewed the world with a sunglass lens over one eye (with both eyes open), moving objects appeared displaced in distance from their true positions. It is possible to see this effect on a TV screen: examine an action movie with an ordinary sunglass lens over one eye and objects such as a car moving across the screen from left to right will appear out of the plane from out of the screen.

This unsolved problem was one of the factors that led me to investigate stereoscopic depth perceptions at high velocities. An optical engineer working at Zeiss (jena) proposed an elegant explanation for the Pulfrich effect. Suppose that the reduction of light in one eye causes it to respond more sluggishly and thus, to delay its signals to the brain. So the covered eye sees the moving object at an earlier time and thus, at an earlier point on its trajectory. This disparity fools the disparity-sensitive cells into computing a false position for the target. The conjecture was triumphantly confirmed when direct recording from retinal cells showed that their response was indeed delayed by reducing the amount of illumination. But calculations carried out on the *effect* revealed some surprising twists. Effect can be simulated by using a stereoscope that slightly delays the signal to one eye. It turns out that our brain senses time delays as small as one half of a thousand of a second. This is smaller than the interval between nerve impulses when a neuron is firing at its fastest rate (about 1,000 impulses per second). Another fact is that the *effect* is still seen when the moving target is presented in a series of flashes such that the flashes occur in the same places in the two eyes, but with a slight delay between the two eyes.

This would not be expected from the simple disparity theory. Finally, a 3D *effect* is seen when the purely random noise such as snowstorm on a detuned TV receiver is examined with a delay between the eyes. Where is the disparity in this case? Anomalies such as these led to the suggestion that the brain computes the position of moving targets by some special mechanism, which is directly sensitive to the differences between the eyes. Is there a stereo mechanism tuned to the movement? I decided to examine the question using a special class of stimuli called sine-wave gratings? Surprisingly, I observed that viewers could not detect delays between the eyes as the velocity of the movement was increased. There seemed to be no upper velocity limit to detection: observers could tell which eye was stimulated first at velocities of up to 1,0000 per second. Observers could detect delays as little as 450 microseconds.

12. Which of the following according to the passage, is incorrect:
    I. According to the Pulfrich *effect,* the covered eye sees the object at an earlier time.

II. The image formed by the eye on the light sensitive cells of the retina is doubly inverted.
III. The amount of illumination affects the disparity sensitive cells.
IV. The brain images stationary and moving objects similarly.

(a) II only
(b) II and III only
(c) II and IV only
(d) I and II
(e) II, III and IV only

13. The generally accepted physiological theory of disparity sensing is that

I. Two eyes look at the world from slightly different vantage points.
II. Viewers could not detect delays between the eyes as the velocity of the movement was increased.
III. The cells in the brain are stimulated by light falling on slightly different parts of the left and right eyes, making them most responsive to objects at a particular distance.
IV. Effects can be stimulated by using a stereoscope that slightly delays the signal to one eye.

(a) I & II only
(b) II & III only
(c) I & III only
(d) I & IV only
(e) I, II, & III but not IV.

14. Which of the following is correct according to the passage?

(a) Our brain senses time delays as small as one tenth of a thousandth of a second.
(b) Three dimensional images are uniform to all living species.
(c) Brain computes the position of moving targets by some special mechanism.
(d) The neuron is responsible for the delay in images formed in the eye.
(e) The eye forms a small inverted image in the light-insensitive cells of the retina.

Passage 4

The story of Giselle is a simple one. A country girl falls for a prince who has come to her village in disguise. When she finds that her Albrecht is a *poseur,* actually betrothed to a princess, she goes mad and dies. He visits her grave, penitent. Giselle, now a spirit. is commanded by the queen of the spirits to lure Albrecht to death by her dancing; instead, she rescues him before returning to her grave.

It is all in the best early 19th-century German Romantic taste: jovial peasants, gloomy forests, simpering maidens dancing in a line and a dreadfully sentimental score. Or so it appeared to Alicia Markova when at 18 she began to hear suggestions that she should dance the role. The world, surely, had moved on since then.

She herself had embraced a style of ballet utterly removed from organza and *pas* de deux. Since being taken up by Serge Diaghilev, who had spotted her in 1924 as a waif-like child at her Chelsea dancing class, she had been at the cutting-edge of the modern movement. She had worn a daring white leotard, covered with squiggles drawn on personally by Matisse, to dance the title role in Stravinsky's "Le Rossignol", and had learned, under Stravinsky's direction, to move to melody rather than beats. The world of the 1920s was cynical and syncopated the ballet full of athleticism, primitivism and jazz. It had no room, surely, for the sugary old melodramas of Gaultier and Heine.

Nonetheless, Diaghilev—"Sergi pop", as she called him—had planned a Giselle for her before he died, in 1929. And in 1932, as she assisted Olga Spessivtseva, who was dancing the role, Miss Markova felt her attitude changing. Sitting on a chair in the wings, she began by simply scrutinizing the diva's footwork; but by the end of Act 1, she found herself in tears. She had never dreamt that so much emotion could be combined with the strictness of classical dancing. As she wrote later, still surprised, "I had not been schooled in this."

From that moment, Giselle was her role, danced almost constantly until she retired in 1963. It was one that particularly suited her, combining steely strength with ethereal grace. For much of the second act, she seemed to float and fly, as if the air was her natural element. Sometimes her leading men (usually Anton Dolin, with whom she was supposed to have been secretly in love) appeared to have trouble bringing her to earth again. Yet the multiple *fouettes* of the second act were exhausting, and the double-turning jumps were something no woman had done before her. Her dancing was all the more extraordinary because, as a child, she had been so knock-kneed and flat-footed that doctors predicted she would spend her life in leg-irons.

Yet Giselle was still a rather creaky, old fashioned vehicle for a woman who was also, at the same time, wildly dancing

the Polka in Walton's "Facade" and cavorting in a body-suit in Stravinsky's "Rouge et Noir". She was often asked why it was so important to her. In her small, careful voice she would explain that Giselle was the fullest single expression of what can be said in terms of the dance. It was her duty, she felt, to keep the beauty of that character alive through her own.

It was also her duty to bring classical ballet to audiences in Britain and America that had lost touch with it, or had never known it. Dance in the early 20th century was a Russo-French monopoly; plain Alice Marks had been rechristened "Markova" by Diaghilev because a dancer with a British name would not be taken seriously. This she resolved to change, and Giselle was her means to do it.

The role was a central feature of the seasons she helped arrange in the 1930s and 1940s at the Ballet Rambert and the Vic Wells Ballet Gater the Royal Ballet, both ensembles newly formed to cater to the masses. She danced it not only at the Old Vic and the New York Met but at a greyhound-racing stadium in London, where, in the interval, the balletomanes queued for hot dogs and orangeade. Once she left her wings in a cab; the driver happily returned them to "the dancer who flies".

Over the years, her personality and Giselle's became inseparable in the public mind. Her fans were certain that, when analysing Giselle in her book, "Giselle and I", she was describing herself:

She is quiet, yet inflexible in her loves and loyalties, sensitive, yet with an innate simplicity. Always she stands a little apart from her exotic colleagues, the great ladies of Ballet's fairyland, scarcely venturing into this regal Court of Stars, though in one sense, she is Queen of them all.

In reality, the simple village girl was on $1,000 a week, and able to negotiate such fees with merciless hard-headedness. Rather than favouring peasant skirts and wreaths of woodland flowers, her tastes ran to full-length mink coats and Ferragamo shoes. The onstage wraith would fall on steaks and chocolates as soon as the curtain had descended. But there was always a china-cool remoteness and independence about her—and absolutely no doubt, until Margot Fonteyn's star began to rise, that she was queen of them all.

15. The 1920s world of ballet contained all of the following except:
    (a) athleticism.
    (b) melodrama.
    (c) primitivism.
    (d) jazz.
    (e) None of these.
16. The author's style in the passage can at best be described as
    (a) flattering.
    (b) admiring.
    (c) appreciating.
    (d) both (b) & (c).
    (e) critical.
17. According to the passage, which of the following is not true?
    (a) Gautier did not stand for melodramas.
    (b) Markova was not flat-footed as a child.
    (c) Markova brought classical ballet to Germany.
    (d) Heine did not stand for melodramas.
    (e) All of the above.
18. Which of the following is not a merit of Markova according to the passage?
    (a) her ability to deal with money.
    (b) her independent views.
    (c) loyal and sensitive with innate simplicity.
    (d) flat-footedness and knock-kneed.
    (e) none of the above.
19. According to the passage, which of the following as a ballet dancer, rose to stardom after Alicia Markova?
    (a) Margot Fonteyn
    (b) Olga Spessivtseva
    (c) Serge Diaghileu
    (d) Alice Mark.
    (e) Cannot be determined from the information in the passage.

Passage 5

My last growth point offers a chance to bring together the perspectives of Darwin, Marx and Freud. It leads us to the question at the foundations of the human sciences: what is basic, how amenable to change is human nature and how can we bring about more humane human relations? As I see it, all these matters come together in the problematic Marxist notion of 'second nature'. First nature is the biologically given-domain whose boundaries have themselves never been clearly drawn and are now quite open as a result of the phenomena of pharmacology, biofeedback (in traditional and

modern forms) and genetic engineering (an area in which the future is open in both positive and alarming senses).

But without pushing those boundaries between the voluntary and involuntary nervous system and between mere inheritance and manipulated inheritance, we have a large scope for deep reflection and serious practice. Historians of the human sciences will know that belief in the extreme plasticity of human behavior has been held by behaviourists, operant conditioning theorists and those thinking in the related tradition of Pavlovian conditioning. At the other extreme, behavioural geneticists and sociobioligists have held relatively pessimistic views on the potential for change in human behaviour. Moreover, the sociobiologists have made various takeover bids into ethics and the social sciences, although these seem under control for the present.

There is a similar continuum on the optimism/pessimism axis among psychoanalysts. Does psychoanalysis or psychoanalytical psychotherapy change the self or merely adapt it to the given of the inner and outer worlds? Second nature is history experienced as if it were unmodifiable—as though it were not amenable to change through practice and enlightenment. Belief in the ability to learn through practical experience is the sine qua non of an enlightened human science, however onerous and slow the process of change. Those of us in the East and West who reached for rapid change in the nineteen-sixties, have learned a lot about the pace that one can hope for.

Neurosis is a perfect example of second nature. On a larger scale, so is racism. On a still larger scale, so are capitalism and eastern European socialism. Beyond these in a degree of generality, lie hierarchy and patriarchy. An important desideratum for a human science is the study of the relative refractoriness to change of various aspects and levels of human nature.

The writings I have found most helpful in understanding second nature are both Freudo-Marxist. They are the works of Herbert Marcuse and Russell Jacoby, although other members of the Frankfurt school, as well as the Lukacs of History and Class Consciousness, and various Hungarian philosophers, have also thought about it. Both Marcuse and Jacoby have written widely against various reductionisms – Darwinian, vulgar Marxist and biologistic Freudian. They have also essayed against extremes of voluntarism and Dionysiac Freudianism. Both have been concerned to pay due respect to the given in biology, economics, culture and therapy, while striving for a better psychic and social order. Both have de-emphasized traditional notions of class struggle as the key to social change and have focused more clearly on cultural and other political processes. Their perspectives are complemented by the writings of Gramsci on the subtle ways in which consent is organized. In addition to his concept of hegemony, I have benefited from Raymond Williams' writings on cultural materialism. His critique of base-superstructure model of vulgar Marxism stresses the complexity of mediation between culture on the one hand, and the production and reproduction of real life on the other. Indeed, he adds the crucial insight that culture is in the base—a material, that is, spiritual need. Raymond Williams died between the delivery and the publication of this talk. His voice—its substance and its tone – are central to my conception of humanity, and I wish to dedicate my remarks to his memory.

This brings us back to basics. Look now, Darwin, Marx and Freud are mutually constitutive, Darwin brings historicity to the heart of the sciences, linking life to the earth and our humanity to both. Teleological and anthropomorphic concept lie at the basis of his concept of natural selection. Marx teaches us the historicity of all—including scientific-concepts, and points out that there is only one science, the science of history. Freud teaches us that all of history and culture continue to be mediated by basic human drives and that no matter how high we reach into abstractions, our thought remains rooted in primitive psychic mechanisms.

It would seem, then, that our conception of human science must always draw on these three dimensions of what Marx calls our species being. The historical, conceptual and practical tasks that follow from this will surely occupy all of us at least to the retiring age.

We have in these three thinkers—at first glance—biology, economics and the psyche, but looked at more closely, each takes us to history and historicity, to culture and its roots and to the question of the nature and extent of what is distinctly human—the limits, the realities, the visions, aspirations and achievements now and in the future. As I read them, each offers us a conception of the disciplined study of humanity which always retains a notion of human values in action as the central guiding conception. None will do alone while the task of integrating them in historical studies and in theory has hardly begun. Their writings span the century between about 1840 and 1940. Darwin (1809–82) and Marx (1818–83) were—how easily we forget this – near contemporaries and published their main works almost simultaneously. They died

within a year of each other, just over a hundred years ago. (Indeed, 1986 was the centenary year of Darwin's Life and Letters.) Freud was a toddler of three years when The Origin of Species and An Introduction to Political Economy appeared in 1859. The problematic of his life's work makes little sense without seeing both Darwin and Marx as providing the framework of ideas and aspirations about nature and human nature, which he addresses. All three are very much alive today—vivid—providing us with the terms of reference for both a realistic and a cautiously hopeful view of our humanity.

20. According to the passage, the role of belief in the ability to learn through practical experience for an enlightened human science is
    (a) very important.
    (b) indispensable.
    (c) insignificant.
    (d) unimaginable.
    (e) dispensable.
21. According to the passage, which of the following is most helpful in understanding second nature?
    (a) Freud and Marx
    (b) Herbert Marcuse and Russel Jacoby
    (c) Members of Frankfurt school
    (d) (b) and (c) both
    (e) Lukaces of History and class-consciousness.
22. According to the passage, which of the following is true?
    (a) Marcuse and Jacoby rejected the role of class struggle as the key to social-change and have laid emphasis on cultural and political processes.
    (b) Marcuse and Jacoby recognised the role of class-struggle as the key to social-change.
    (c) Marcuse and Jacoby saw the cultural and political processes as the only key to social change.
    (d) Marcuse and Jacoby recognised a lesser role of class-struggle as the key to social-change than that of the cultural and political processes.
    (e) None of these.
23. According to the passage
    I. Behaviourists believe in the potential for extreme change in human behaviour.
    II. Behavioural geneticists do not believe in the potential for extreme change in human behaviours.
    III. Sociobiologists believe, to some extent, in the potential for extreme change in human behaviour.
    (a) (I) and (II) are correct.
    (b) Only (I) is correct.
    (c) (I) and (III) are correct.
    (d) Only (II) is correct.
    (e) Only II & III are correct.
24. According to the passage, all of the following are not true except:
    (a) Freud does not see any meeting point between history and culture.
    (b) Darwin rejects the centrality of life.
    (c) Freud, Marx and Darwin are not in contradiction among themselves, but they do project different perspectives.
    (d) Darwin and Marx are unanimous on the role and place of history in linking life to the earth and our humanity to both.
    (e) Freud, Mare, and Darwin are contradictory to each other.
25. According to the passage, Darwin, Marx and Freud all provide us the most important conception of
    (a) historicity
    (b) humanity
    (c) history
    (d) human sciences
    (e) evolution

TEST 2

Passage 1

For a perspective on the polarization electrotonic hypothesis, one should consider the examples of simple forms of temporary connexion-summation reflex and the dominant *focus,* generally called the dominant. Though akin to the conditioned reflex in character, both differ from it by a number of significant attributes. In eliciting conditioned reflexes, the summation reflex and the dominant are the initial phases of their initiation. So the latter two forms must be logically defined as temporary connexions or the initial phases of a single complex process leading to the rise of new connexions. The dominant and its physiological mechanisms are more complex than the summation reflex. For one thing, the latter has not the large inertia that the dominant has. For another, if there is any conjugate inhibition during the summation

reflex, it occurs not in the way it does under the dominant. In that event, furthermore, conjugate inhibition differs from the conventional reciprocal reaction of inhibition because it exerts itself via the connexions brought about by newly formed interrelations in the central nervous system, and not via the connexions anatomically consolidated through the process of evolution. The conditions for and phases of conditioning are well-known from the doctrine of higher nervous activity. The physiological mechanisms for conditioned reflex elaboration are genetically linked with summation. This is not to say that conditioned reflex is equivalent to either the dominant or summation reflex, even though both of them, by virtue of their mechanism, do have a role in the formation of a complex form of temporary connexion. The general circuit diagram of the relation between the physiological mechanisms of summation reflex, the dominant and conditioned reflex may be dissimilar to the relation between specific forms of expression of the dominant and conditioned reflexes. This is because each of them can have a varied degree of complexity in terms of the structures involved in the reaction, levels of the structures and their implications for animal behaviour. For our hypothesis, the startling theoretical assumptions have been the Pavlov theory for dynamic localization of functions and the Ukhtomsky concept of the dominant. In the general context of his theory regarding dynamic localization of functions, Pavlov introduced the concept of 'centre' as a functional integration of neural formations located on different levels in the central nervous system. Variable functions of the nerve cells in the cerebral cortex, according to Pavlov, depend on their *state* which, other conditions being equal, controls their response to a stimulus. Ukhtomsky, reasoning from Wedensky's teaching but drawing on other specific evidence, developed the same understanding of 'centre'. By general inference from Wedensky's teaching, he accepted the proposition that the *functional state* of an excitable substrate, other conditions being equal, determines the reaction to a stimulus. These general postulates by the classics of physiology premised our initial theoretical position for experiments with action by direct current on the cortex and subcortical formations. This was our line of reasoning: if indeed Pavlov and Wedensky with Ukhtomsky were right in assuming that the functional state of a neural substrate, other conditions being equal, does determine the response to a stimulus, then direct current must of necessity be made part of the experiment, much more on the cerebral cortex. The general physiology of the nervous system knows of no better factor to employ as the agent to modify gradually, the state of a neural substrate, than weak direct current. It was our feeling that by gradually modifying the intensity of direct current it would be possible to pick up all progressive alterations of the functional state and locate the optimum likely to give rise to the exact state, necessary for the formation of however simple, but still new, temporary connexion in the cerebral cortex. The thesis suggesting for the state of a neural substrate, a decisive role in determining, other conditions being equal, the reaction to a stimulus, lays a bridge that joins the Pavlov doctrine with that of Wedensky-Ukhtomsky, its derivation from different experimental data notwithstanding.

The first fundamental principle of the polarization electrotonic hypothesis is this: *weak direct current, more precisely the electric field it generates, acts on the cerebral cortex, modifying the state of the nerve cells there and is an essential determinant factor of change in the function of these cells.*

Based on pertinent experimental findings in our laboratory and data from the literature, we have come to the conclusion (Rusinov, 1951) that overall rhythms of the electrical activity of the cerebral cortex suggest, first and foremost, the presence of a connexion between neurons that may have three different forms, or types, of expression. The first type of the functional connexion between neurons is a gradually spreading excitation (which we called 'local spreading excitation'). The second type is a propagating wave of excitation, shown electrographically as an action current or action potential (AP). The third connexion type is electrotonic, that is, similar to the action of a direct current. All the three types of the *c*onnexion, between 'neuron's' comprise a total connexion system, and thereby define the functional unity of the nervous system. Let us examine these types of functional communication between neurons to see which is the major one in the formation of simple forms of temporary connexion. On present neurophysiological evidence, discrete processes in the nervous system—in the form of action potentials driving impulse transmission—occur mainly in the nerve fibre and not at the neuronal input and output, the critical integration sites of the neuron; the gradual processes in action there may be described as continuous functions. Some evidence in the literature suggests that changes in the state of the neuron may not necessarily be accompanied by the generation of an impulse, but still influence the activity of neighbouring neurons, thus compelling recognition for the probabilistic character of neuronal discharge. There is no question that an electric field

has the ability to modify the activity of neighbouring neurons. In other words, the processes going on in the nervous system make up a complex plexus of both analog and discrete properties of the system, which is at once deterministic and probabilistic in character. Much attention is being paid today to the functional role of gradual electrotonic potentials and their presumed involvement in information transmission to the neighbouring neuron, particularly, through dendrodendritic or axoaxonal junctions or even as a gradual process propagating via the axon itself. In view of the methodological difficulties involved, there are as yet no accurate direct electro physiological data on that score. There are nonetheless indirect pointers to possible conveyance of gradual electrical activity through the axon in the form of a monophase potential. The proposition about the first type of connexion between neurons ensued from experiments with repeated KCI alteration of the sciatic nerve in the frog. Wedensky considered such a nerve segment and the processes set in train there in response to stimulation, as an analog, a model of the cell in the central nervous system. Our laboratory offered a clear demonstration that under certain conditions, specifically after repeated alteration with KCl of a frog sciatic nerve segment, gradual potentials are able to radiate through the nerve in monophase waves. Because of its resemblance with local excitation, it was called 'local spreading excitation' but in fact, this is gradual spreading excitation (Grindel and Rusinov, 1957). Therefore, the concept of gradual spreading excitation as a possible type of functional connexion between neurons leaned on the support of factual data. Frolov and Mauranin from the neurocybernetics laboratory of the InstItute of Higher Nervous Activity and Neurophysiology have presently shown, using a mathematical model, that apparently, an intermediate potential between the AP and electrotonic potential might propagate in dendrites of the central nervous system (CNS). Our first type of functional connexion between neurons is exactly the intermediate type between AP and electronic transmission. As is known, evidence for the possible transmission in the form of a gradual potential has been found also for the retina. The American investigators, Schmitt, Dev and Smith (1976), emphasize in the article 'Electrotonic Processing of Information by Brain Cells' that investigations of the latter day anticipate recognition of an important role for local circtuts in higher brain functions(Schmitt et al, 1976). Among other things, they point to a major rethinking on the concept that information transfer between neurons requires the spike to spread. The data of the recent years indicate that minor gradual changes in one neuron may affect the electrical activity of other neurons (Dowling, 1970; Ezrokhi, 1970; Shepherd, 1974). Our proposition for the third type of functional connexion between neurons was rested on the data of Wedensky and other scientists, about the effect and long-distance effect in the nervous system of a weak direct current, meaning the physiological electrotone. For, consistent with the Wedensky concept, we do distinguish between physical and physiological electrotone. While the former is observable on live and dead nerves, the latter is on the live nerve only. Consequently, speaking about the third type of functional connexion between neurons, we mean properly the electrotonic effect similar to the effect of a weak direct current. Now it is common knowledge that the effect of a weak direct current on CNS can modify the distribution of interspike intervals. The study of the influence of a weak direct current (from *0* to *10.10-6* A) on cortical and subcortical formations was the central line of research in a series of our works devoted to the polarization dominant. The second fundamental principle of the polarization electrotonic hypothesis for the formation of simple forms of temporary connexions reads as follows: *in addition to the presence and action of chemical and electric local fields, there exist three types of the functional connexion between neurons expressed bioelectrically as a spreading gradual potential,* a *well-familiar action potential,* and *an electrotonic interaction.* All the three types support the system of communication between neurons and participate in the formation of the dominant and initiation of the dominant focus.

1. What defines the functional unity of the nervous system?
   (a) The state of a neural substrate.
   (b) Local spreading excitation, action potential and electrotonic connexions.
   (c) The dynamic localisation of functions.
   (d) Summation reflex and the dominant focus.
   (e) Local spreading excitation of a neural substrate.
2. What may not be similar according to the passage, to the relation between specific forms of expressions of the conditioned & dominant reflexes?
   (a) The temporary connexions or the initial phases of a single complex process, leading to the rise of new connexions.

(b) The functional states of a neural substrate.
(c) The relation between the physiological mechanisms of the three reflexes, i.e., summation, dominant & conditioned shown by a general circuit diagram.
(d) All of the above.
(e) Both (a) & (b).

3. What ensued from the experiments that were done in the sciatic nerve in the frog with repeated potassium chloride alterations?
(a) The hypothesis about the first type of connexion between neurons.
(b) The functional state of an excitable substrate.
(c) The difference between the physical and physiological electrotones.
(d) Electrotonic Processing of Information.
(e) The functional state of physiological electrotones.

4. Discrete processes in the nervous system—in the form of action potential driving impulse transmission—happens
(a) at the neuronal input and output.
(b) the critical integration sites of the neuron.
(c) in the nerve fibres.
(d) all of the above locations.
(e) Only (a) & (b).

5. What did Pavlov mean by the concept of 'centre'?
(a) A functional integration of neural formations on different levels of the CNS.
(b) an excitable substrate.
(c) A cell.
(d) A nucleus.
(e) An excitable substrate of neural formations on different levels of the CNS.

6. What are the initial phases of a single complex process which give rise to the new connexions?
(a) Summation reflex.
(b) Dominant focus.
(c) Both (a) and (b).
(d) Either (a) or (b).
(e) Nither (a) nor (b).

7. According to the Polarisation Electrotonic hypothesis, what is supposedly similar to the action that might also be stimulated by the action of a direct current?
(a) Local spreading excitation.
(b) Propagating wave of excitation.
(c) Action Potential.
(d) Electrotonic connexion.
(e) None of these.

8. While considering the examples of simple forms of temporary connexions, the author logically arrives that the dominant focus (or the dominant) together with its physiological processes is supposedly more complex than the other simple form of temporary connexion, the summation reflex, due to which of the following?
I. Summation reflex does not have the large inertia the dominant has.
II. Conjugate inhibition differs from the conventional reciprocal reaction of inhibition in the dominant.
III. Conjugate inhibition during the summation reflex differs in its occurrence from its occurrence in the dominant.
(a) I only
(b) I & II
(c) I & III
(d) All of these.
(e) II & III only.

9. Which of the following is true according to the passage?
I. Pavlov's theory regarding the dynamic localisation of functions says that the suspense of nerve cells to a stimulus is controlled by the state of the excitable substrate.
II. Ukhtomsky's concept of the dominant was formulated subsequent to the teachings of Wedensky.
III. According to Ukhtomsky, other things being equal, the functional state of an excitable substrate determines the relation to a stimulus.
(a) I & II
(b) II & III only
(c) I & III only
(d) I, II & III
(e) Only I

10. What is observable only on the live nerve?
I. Action Potential.

II. Physiological electrotone.
III. Physical electrone.

(a) I, II & III
(b) II & III
(c) only III
(d) only II
(e) only I

11. Apart from the three types of functional connexions between neurons, what other factors affect the formation of simple forms of temporary connexions?
    (a) Chemical and electric local fields.
    (b) Excitation of excitable substrates.
    (c) State of the nerve cells.
    (d) Both (a) and (b).
    (e) Chemical and electric local fields in the context of the state of the nerve cells.
12. What is both deterministic and probabilistic in character?
    (a) Generation of an impulse.
    (b) The processes going on in the nervous system.
    (c) The role of gradual electrotonic potentials.
    (d) Local spreading excitation.
    (e) None of these can be inferred.

Passage 2

ALL men by nature, desire to know. An indication of this is the delight we take in our senses: for even apart from their usefulness they are loved for themselves; and above all others, the sense of sight. For not only with a view to action, but even when we are not going to do anything, we prefer seeing (one might say) to everything else. The reason is that this, most of all the senses, makes us know and brings to light many differences between things. By nature, animals are born with the faculty of sensation, and from sensation, memory is produced in some of them, though not in others. And therefore, the former are more intelligent and apt at learning than those which cannot remember; those which are incapable of hearing sounds are intelligent though they cannot be taught, e.g., the bee, and any other race of animals that may be like it; and those which besides memory, have this sense of hearing can be taught. The animals other than man live by appearances and memories, and have but little of connected experience; but the human race lives also by art and reasonings. Now from memory, experience is produced in men; for the several memories of the same thing produce finally the capacity for a single experience. And experience seems pretty much like science and art, but really, science and art come to men through experience; for 'experience made art', as Polus says, 'but inexperience luck.' Now art arises, when from many notions gained by experience, one universal judgement about a class of objects is produced. For to have a judgement that when Callias was ill of this disease that did him good, and similarly, in the case of Socrates and in many individual cases, is a matter of experience; but to judge that it has done good to all persons of a certain constitution, marked off in one class, when they were ill of this disease, e.g., to phlegmatic or bilious people when burning with fevers—this is a matter of art.

With a view to action, experience seems in no respect inferior to art, and men of experience succeed even better than those who have theory without experience. (The reason is that experience is knowledge of individuals, art of universals, and actions and productions are all concerned with the individual; for the physician does not cure man, except in an incidental way, but Callias or Socrates or some other called by some such individual name, who happens to be a man. If, then, a man has the theory without the experience, and recognizes the universal but does not know the individual included in this, he will often fail to cure; for it is the individual that is to be cured.) But yet we think that knowledge and understanding belong to art rather than to experience, and we suppose artists to be wiser than men of experience (which implies that wisdom depends in all cases rather on knowledge); and this because the former know the cause, but the latter do not. For men of experience know that the thing is so, but do not know why, while the others know the 'why' and the cause. Hence we think also that the masterworkers in each craft are more honourable and know in a truer sense and are wiser than the manual workers, because they know the causes of the things that are done (we think the manual workers are like certain lifeless things which act indeed, but act without knowing what they do, as fire burns, but while the lifeless things perform each of their functions by a natural tendency, the labourers perform them through habit); thus we view them as being wiser not in virtue of being able to act, but of having the theory for themselves and knowing the causes. And in general, it is a sign of the man who knows and of the man who does not know, that the former can teach, and therefore, we think art

more truly knowledge than experience is; for artists can teach, and men of mere experience cannot.

Again, we do not regard any of the senses as Wisdom; yet surely these give the most authoritative knowledge of particulars. But they do not tell us the 'why' *of* anything—e.g., why fire is hot; they only say that it is hot. At first, he who invented any art whatever, that went beyond the common perceptions of man was naturally admired by men, not only because there was something useful in the inventions, but because he was thought wiser and superior to the rest. But as more arts were invented, and some were directed to the necessities of life, others to recreation, the inventors of the latter were naturally always regarded as wiser than the inventors of the former, because their branches of knowledge did not aim at utility.

Hence, when all such inventions were already established, the sciences which do not aim at giving pleasure or at the necessities of life were discovered, and first in the places where men first began to have leisure. This is why the mathematical arts were founded in Egypt; for there the priestly caste was allowed to be at leisure. We have said in the Ethics what the difference is between art and science and the other kindred faculties; but the point of our present discussion is this, that all men suppose what is called Wisdom to deal with the first causes and the principles of things; so that, as has been said before, the man of experience is thought to be wiser than the possessors of any sense-perception whatever, the artist wiser than the men of experience. The masterworker than the mechanic, and the theoretical kinds of knowledge to be more of the nature of Wisdom than the productive. Clearly then, wisdom is knowledge about certain principles and causes.

13. What is the relationship between sensation and memory?
    (a) All animals have sensation but some animals do not have memory.
    (b) Human beings have sensation and memory both.
    (c) Human beings are intelligent as they can reason, whereas animals do not have the capacity of reasoning.
    (d) When sensation is remembered, it becomes a memory experience and this leads to connected experience, which in turn gives rise to reasoning.
    (e) Remembered sensation gives rise to reasoning.
14. What is the difference between art and experience?
    (a) Art explains the cause of things together with its effects, whereas experience gives us just the effect of things, not the cause.
    (b) Experience and art give rise to one another and they are complementary and supplementary to each other.
    (c) Art does not give the cause and effect of things, whereas experience gives the cause and effect of things.
    (d) Both experience and art are views of a contradictory time and space and this is where the difference between the two lies.
    (e) Art explains to us the cause of things together with its effect, while experience gives us just the effect of things with a probable cause.
15. Why according to the author, were the mathematical arts founded in Egypt?
    (a) Because they were men of experience and had wisdom and knowledge about certain principles and causes.
    (b) Because the inventors of luxuries were considered more important than the inventors of necessities and in Egypt, the kingly and priestly class had developed great standards in luxurious tastes and attitudes.
    (c) Because the sciences which do not cater to necessities or pleasures develop only after the previous two have been invented and only then, men have time for themselves. So was the case in Egypt where the priestly caste had ample leisure time.
    (d) Because Egyptians were considered to be connoisseurs of art and crafts and had superior civilization as opposed to the other ancient civilizations.
    (e) Mathematical arts were better suited to Egyptian priests.
16. Which of the following can be considered to be the central idea of the passage?
    (a) "Experience made art, but inexperience luck".
    (b) What actually is "Wisdom"?
    (c) Art is superior to experience.
    (d) Knowledge is wisdom.
    (e) Wisdom is experience and art is not science.

Passage 3

"Life is not a simple geometrical pattern. The essence of life is creativity. It is a living creation of something new, not a dead connection of cause and effect. Then a ploughman said, "Speak to us of Work." And he answered, saying: You work that you may keep pace with the earth, and the soul of the earth. For to be idle is to become a stranger unto the seasons, and to step out of life's procession that marches in majesty and proud submission towards the infinite.

When you work, you are a flute through whose heart the whispering of the hours turns to music. Which of you would be a reed, dumb and silent, when all else sing together in unison? Always you have been told that work is a curse and labour a misfortune. But I say to you that when you work, you fulfill a part of earth's furthest dream, assigned to you when that dream was born. And in keeping yourself with labour you are in truth, loving life, and to love life through labour is to be intimate with life's inmost secret.

But if you in your pain, call birth an affliction and the support of the flesh a curse written upon your brow, then I answer that naught but the sweat of your brow shall wash away that which is written. You have been told also that life is darkness, and in your weariness you echo what was said by the weary. And I say that life is indeed darkness save when there is urge, and all urge is blind save when there is knowledge, and all knowledge is vain save when there is work, and all work is empty save when there is love; and when you work with love you bind your self to yourself, and to one another, and to God. And what is it to work with love? It is to weave the cloth with threads drawn from your heart, even as if your beloved were to wear that cloth. It is to build a house with affection, even as if your beloved were to dwell in that house. It is to sow seeds with tenderness and reap the harvest with joy, even as if your beloved were to eat the fruit. It is to charge all things your fashion with a breath of your own spirit, and to know that all the blessed dead are standing about you and watching. Often have I heard you say, as if speaking in sleep, "He who works in marble, and finds the shape of his *own* soul in the stone, is nobler than he who ploughs the soil. And he who seizes the rainbow to lay it on a cloth in the likeness of man, is more than he who makes the sandals for our feet." But I say, not in sleep, but in the overwakefulness of noontide, that the wind speaks not more sweetly to the giant oaks than to the least of all the blades of grass; and he alone is great who turns the voice of the wind into a song made sweeter by his own loving. Work is love made visible. And if you cannot work with love but only with distaste, it is better that you should leave your work and sit at the gate of the temple and take alms of those who work with joy. For if you bake bread with indifference, you bake a bitter bread that feeds but half man's hunger. And if you grudge the crushing of the grapes, your grudge distills a poison in the wine. And if you sing though as angels, and love not the singing, you muffle man's ears to the voices of the day and the voices of the night.

17. For what purpose has the author used the analogy of the 'Wind' and the 'Oak'?
    (a) He has used it to differentiate between the mighty 'Oak' and the lowly blade of grass, where the Oak is much more powerful.
    (b) He has tried to show that the Oak due to its sheer size, gets the maximum share of the wind in comparison to others.
    (c) He has tried to show the non-partisan and the impartial character of nature and that it shows that all are equal in the eyes of nature.
    (d) He has tried to explain how the wind which has the strength to blow away the giant Oak, does not even harm the lowly blade of grass.
    (e) Cannot be inferred.
18. What can be understood by the line in the passage—"curse written upon your brow"?
    (a) It refers to our destiny that we have been born with—to toil and support our mortal flesh.
    (b) It refers to our past sins which are the reason why we have been born as mortal humans.
    (c) It refers to the curse of God on Adam and Eve and to all mankind.
    (d) It refers to the misfortunes that we will have to endure as we have been cursed.
    (e) It refers to the curse on mankind that each of us has to carry.
19. Which of the following sentences is correct according to the passage?
    (a) That life is full of darkness.
    (b) Work should be worship and not working leads us to suffering.
    (c) A ploughman is inferior to the one who works in marble.
    (d) If you love what you do, then you have the key to real happiness in life.
    (e) Work is duty.

20. What do you think that the speaker means by talking about—'the dead connection of cause and effect'?
    (a) He is referring to the physical reality of cause and effect, but actually cause and effect is cyclical.
    (b) He is saying that life is not just cause and effect, actually it is not cause and effect at all.
    (c) The speaker wants to say that the theory of cause and effect is a dead theory and is an incompetent philosophy.
    (d) Both (a) & (b).
    (e) None of these.

Passage 4

Civilization cannot merely be a growing totality of happenings that by chance have assumed a particular shape and tendency which we consider to be excellent. It must be the expression of some guiding moral force which we have evolved in our society for the object of attaining perfection. The word 'perfection' has a simple and definite meaning when applied to an inanimate thing, or even to a creature whose life has principally a biological significance. But man being complex and always on the path of transcending himself, the meaning of the word 'perfection' as applied to him, cannot be crystallised into an inflexible idea. This has made it possible for different races to have different shades of definition for this term.

The Sanskrit word dharma is the nearest synonym in our own language, that occurs to me, for the word civilization. In fact, we have no other word except perhaps some newly coined one, lifeless and devoid of atmosphere. The specific meaning of dharma is that principle which holds us firm together and leads us to our best welfare. The radical meaning of this word is the essential quality of a thing.

We have for over a century, been dragged by the prosperous West behind its chariot, choked by the dust, deafened by the noise, humbled by our own helplessness, and overwhelmed by the speed. We agreed to acknowledge that this chariot-drive was progress, and that progress was civilization. If we ever ventured to ask, 'Progress towards what, and progress for whom?'—it was considered to be peculiarly and ridiculously oriental to entertain such doubts about the absoluteness of progress. Of late, a voice has come to us bidding us to take count not only of the scientific perfection of the chariot but of the depth of the ditches lying across its path.

In India, we have a species of Sanskrit poem in which all the complex grammatical rules are deliberately illustrated. This produces continual sparks of delight in the minds of some readers, who, even in a work of art, seek some tangible proof of power, almost physical in its manifestation. This shows that by special cultivation, a kind of mentality can be produced which is capable of taking delight in the mere spectacle of power, manipulating materials, forgetting that materials have no value of their own. We see the same thing in the modern Western world where progress is measured by the speed with which materials are multiplying. Their measure by horse-power is one before which spirit-power has made itself humble. Horse-power drives, spirit-power sustains. That which drives is called the principle of progress, that which sustains we call dharma; and this word dharma I believe should be translated as civilization. Western society, for some ages, had for its central motive force, a great spiritual ideal and not merely an impetus to progress. It had its religious faith which was actively busy in bringing about reconciliation among the conflicting forces of society. What it held to be of immense value was the perfection of human relationship, to be obtained by progress. It is an important objective of every enlightened national government to adopt and execute a development model, strategy, or method, suited to improving the quality of its people's life. The government of a developed nation aims at making the quality still better, even though as it is, it may be quite satisfactory.

21. Why does the author say that perfection cannot be defined for man?
    (a) Because man is not inanimate.
    (b) Because perfection is different for different races.
    (c) Because man has kept surpassing his ideal all the time.
    (d) Because man cannot be perfect.
    (e) Because perfection is an unachievable ideal.

22. Which of the following can be said to be the meaning of dharma according to the passage?
    1. Dharma is the closest in meaning to the word civilisation.
    2. Dharma is that which leads to our betterment.
    3. Dharma is the inherent quality of a thing.

    (a) Both 1 & 2.
    (b) Only 3
    (c) All three

(d) 2 & 3 only
(e) 1 & 3 only.

23. Which of the following according to the passage, cannot be classified as an act of Dharma?
(a) Doing your job sincerely.
(b) Reforming convicts.
(c) Following a religion.
(d) Being kind to fellow human beings.
(e) Cannot be inferred from the passage.

24. What is understood by the phrase in the passage—"lifeless and devoid of atmosphere"?
(a) A word without a cultural and historical background.
(b) A senseless word.
(c) A new word in a language.
(d) Something incoherent and difficult.
(e) A 'dead'word, which is no longer in active use.

25. Which of the following words/expressions would describe the attitude of the author towards different societal ideals?
I. Pro-spiritualism
II. Anti-capitalism
III. Pro-socialism
IV. Anti-materialism
(a) All of these
(b) I & II
(c) I, III & IV
(d) I, II & IV
(e) I, II & III only.

Answer Key

Test I

Passage 1

1. (c) 2. (b) 3. (d) 4. (a) 5. (d)
6. (a)

Passage 2

7. (b) 8. (c) 9. (d) 10. (a) 11. (c)

Passage 3

12. (b) 13. (c) 14. (c)

Passage 4

15. (b) 16. (d) 17. (e) 18. (d) 19. (a)

Passage 5

20. (b) 21. (b) 22. (d) 23. (b) 24. (c)
25. (d)

Test II

Passage 1

1. (b) 2. (a) 3. (a) 4. (d) 5. (a)
6. (c) 7. (d) 8. (c) 9. (b) 10. (d)
11. (a) 12. (b)

Passage 2

13. (d) 14. (a) 15. (c) 16. (b)

Passage 3

17. (c) 18. (a) 19. (d) 20. (a)

Passage 4

21. (c) 22. (c) 23. (e) 24. (a) 25. (a)