

XAT 2013

Decision Making

Instructions [31 - 33]

Marathe is a Vice President in a construction equipment company in the city of Mumbai. One day, his subordinate Bhonsle requested that Kale, a project manager, be transferred to the Chennai office from the Mumbai office. In Chennai, Kale would work alone as a researcher. Bhonsle gave the following reasons for his request: "Kale is known to frequently fight with his colleagues. Kale is conscientious and dedicated only when working alone. He is friendly with seniors, but refuses to work with colleagues, in a team. He cannot accept criticism and feels hostile and rejected. He is over-bearing and is generally a bad influence on the team."

Marathe called upon Gore, another project manager, and sought further information on Kale. Gore recalled that a former colleague, Lakhote (who was also Kale's former boss) had made a few remarks on his appraisal report about Kale. In his opinion, Kale was not fit for further promotion as he was emotionally unstable to work in groups though he had seven years of work experience. Lakhote had described Kale as too authoritative to work under anyone. Lakhote had further told Gore that Kale had an ailing wife, and an old mother, who does not want to stay with his wife.

31. Consider the following solutions to the problem mentioned above:

1. Marathe should transfer Kale to Chennai office
2. Marathe should try and verify the facts from other sources as well
3. Kale should be sacked
4. Kale should be demoted
5. Marathe should suggest Kale to visit a family counselor

Which of the following would be the most appropriate sequence of decisions in terms of immediacy: starting from immediate to a longer term solution?

- A 2, 1, 5
- B 1, 4, 2
- C 2, 3, 4
- D 2, 5, 1
- E 2, 5, 4

32. Consider the following solutions to the problem mentioned above:

1. Marathe should transfer Kale to Chennai office
2. Marathe should try and verify the facts from other sources as well
3. Kale should be sacked
4. Kale should be demoted
5. Marathe should suggest Kale to visit a family counselor

Marathe sought an appointment with Lakhote to find out ways to help Kale. Lakhote is of the opinion that the company's responsibility is restricted to the workplace and it should not try to address the personal problems of employees. If Marathe has to agree to Lakhote's opinion, which of the solutions presented in the previous question would be weakened:

- A 1

- B 2
- C 3
- D 4
- E 5

33. Consider the following solutions to the problem mentioned above:

1. Marathe should transfer Kale to Chennai office
2. Marathe should try and verify the facts from other sources as well
3. Kale should be sacked
4. Kale should be demoted
5. Marathe should suggest Kale to visit a family counselor

Which of the following statements, if true, would weaken the decision to sack Kale the most?

- A A Government of India study established that employees with 5-10 years of work experience tend to have conflicting responsibilities at home and office. However, these conflicts wither away after 10 years of experience.
- B Another article published in the magazine, Xaviers Quarterly, highlighted that employees' problems at home affect their performance at work
- C In the latest issue of a reputed journal, Xaviers Business Review, it was published that most top managers find it difficult to work in a group.
- D It was published in Xaviers Management Review (another reputed journal) that individuals who cannot work in teams find it difficult to adjust to a new location.
- E Bhonsle was of the opinion that emotionally unstable persons find it difficult to get back to normal working life.

Instructions [34 - 36]

Read the following caselet and choose the best alternative:

It was the end of performance review cycle for the year 2012 when you asked your subordinates about any problems they were facing. Natrajan told you that an important member of his team, Vardarajan, who had also won the best performance award for the year 2011, was not taking interest in work. Despite Natrajan's counseling, no change was noticed in Vardarajan, rather his attitude deteriorated. You had also received such information from other employees. You had not interfered hoping that Natrajan, an experienced hand, would be able to solve the problem. But now that Natrajan himself brought this to your notice, you decided to call Vardarajan and counsel him.

34. Which of the following could be the most unlikely reason for Vardarajan's declining involvement in the workplace?

- A Vardarajan does not find the work challenging enough as he has already achieved the best performance award.
- B Others in the organization have been trying to pull him down, since he was declared best performer.
- C Vardarajan was not promoted after his superlative performance, while another colleague, Sundararajan, was promoted although he was not as good a performer as Vardarajan.
- D After putting in lots of effort for the superlative performance, Vardarajan felt burnt out.

E Vardarajan was appreciated by his bossès for his achievement last year.

35. Vardarajan did not find his work challenging enough, given below are some steps that could be taken to motivate him:

- A Give Vardarajan a more challenging assignment
- B Transfer Vardarajan from Projects department to Training department
- C Ask him to take a vacation for two months
- D Send him for further training on decision making under stress

36. You overheard a conversation between Vardarajan and his colleague over an official dinner. He expressed his unhappiness about the fact that good performers were not given their due credit while poor performers were promoted faster. If Vardarajan is right, which of the following steps would help in creating a better organization?

- A Promote Vardarajan with immediate effect.
- B Ensure that performance is objectively and transparently assessed.
- C Give another assignment to Vardarajan.
- D Give higher salary to Vardarajan.
- E Fire Vardarajan.

37. Over the last five years, Bank of Bharat has seen the number of its retail customer accounts drop by over 40 percent. Over the same period, the share price of Bank of Bharat has increased by more than 80 percent. This amazed a few investors, who believe that a bank's share price should drop if its number of customers drops. Which of the following, if true over the last five years, best accounts for the observed movement in the price of Bank of Bharat's equity shares?

- A Two years ago Securities and Exchange Board started an investigation on the bank for accounting irregularities, but last year the company was cleared of all charges.
- B The bank recently implemented a highly publicized program for free home loans.
- C The bank has been switching its customer base from retail customers to commercial customers, which now accounts for over 75 percent of the bank's revenues.
- D There have been many new banks, which have entered retail banking business over the last five years.
- E The bank is known to be the best paymaster in the industry.

38. Gastric bypass surgery has been shown to be effective at helping extremely obese people lose weight. Some patients have lost as much as 300 pounds after undergoing the surgery, thereby substantially prolonging their lives. Despite the success of the treatment, most doctors have not embraced the surgery. Which of the following statements, if true, best accounts for the lukewarm reaction of the medical community to gastric bypass surgery?

- A** Gastric bypass surgery carries a high risk of serious complications, including death.
- B** Obesity is one of the leading contributors to heart disease and hypertension, two leading causes of death.
- C** Incidences of obesity among the Indian urban middle class population have been increasing consistently for the last three decades.
- D** Many patients report that losing weight through diets is ineffective, since they usually gain the weight back within six months.
- E** Most health insurance plans will cover the cost of gastric bypass surgery for morbidly obese patients at high risk of heart disease.

Instructions [39 - 40]

Read the following caselet and choose the best alternative:

Island of Growth was witnessing a rapid increase in GDP. Its citizens had become wealthier in recent times, and there had been a considerable improvement in the standards of living. However, this rapid growth had increased corruption and nepotism in the Island. In the recent times, a fear had gripped the population that corruption would destroy the inclusive nature of the society and hinder economic progress. However, most citizens had kept quiet because:

- a. they had benefited from the corruption indirectly, if not directly.
- b. they did not have the time and energy to protest.
- c. they did not have courage to rise against the established power centers.

There was a need to remove corruption but no one was willing to stick his neck out. Many politicians, bureaucrats and private organizations were corrupt. Media and intellectuals kept quiet, as they benefited indirectly from corruption. The common man was scared of state's retribution and the youngsters feared insecure future.

Against this background, an old, unmarried and illiterate gentleman of high moral and ethical authority, Shambhu, decided to take on the issue of corruption. He sat on a hunger strike in the heart of the capital city of the Island. Shambhu demanded that the Government should constitute new laws to punish the corrupt across all walks of life. Media and the citizens of the island gave massive support to Shambhu. Buckling under the pressure, the Government promised to accept Shambhu's demands. He ended the hunger strike immediately following the Government's announcement. Shambhu became the darling of the media. He used this opportunity as a platform to spread the message that only citizens with an unblemished character should be allowed to hold a public office.

A few months later, it was found that the Government had not fulfilled any of its promises made to Shambhu. Infuriated, he was thinking of launching another island-wide protest. However, this time, he sensed that not many people and media persons were willing to support him.

39. Read the following statements:

- 1. People's latent anger against corruption
- 2. Shambhu's moral courage
- 3. Hungry media looking to raise issues
- 4. Raising income level

In your opinion, which combination of the above statements is the most unlikely reason for Shambhu's initial success?

- A** 1,2,4
- B** 3,4

- C 1,3
- D 1,3,4
- E 1,2,3,4

40. Which of the following could be the most likely reason for decline in public support for Shambhu?

- A The common man had become sick and tired of Government's inaction against rising corruption.
- B Shambhu was old and he lacked the energy to garner the same support that he enjoyed from the media and the public in the initial stages.
- C The general public may have realized that Shambhu was focusing too much on "indirect involvement" in past incidences of corruption. Common men found it difficult to live up to the high standards set by Shambu.
- D Shambhu's colleagues were misleading him.
- E Shambhu came from a village, while most of his supporters were city dwellers.

Instructions [41 - 43]

Read the following caselet and choose the best alternative:

Head of a nation in the Nordic region was struggling with the slowing economy on one hand and restless citizens on the other. In addition, his opponents were doing everything possible to discredit his government. As a famous saying goes, "There is no smoke without a fire", it cannot be said that the incumbent government was doing all the right things. There were reports of acts of omission and commission coming out every other day.

Distribution of public resources for private businesses and for private consumption had created a lot of problems for the government. It was being alleged that the government has given the right to exploit these public resources at throw-away prices to some private companies. Some of the citizens were questioning the government policies in the Supreme Court of the country as well as in the media. In the midst of all this, the head of the nation called his cabinet colleagues for a meeting on the recent happenings in the country.

He asked his minister of water resources about the bidding process for allocation of rights to setup mini-hydel power plants. To this, the minister replied that his ministry had followed the laid out policies of the government. Water resources were allocated to those private companies that bid the highest and were technically competent. The minister continued that later on some new companies had shown interest and they were allowed to enter the sector as per the guidelines of the Government. This, the minister added, would facilitate proper utilization of water resources and provide better services to the citizens. The new companies were allocated the rights at the price set by the highest bidders in the previous round of bidding. After hearing this, the head of the nation replied that one would expect the later allocations to be done after a fresh round of bidding. The minister of water resources replied that his ministry had taken permissions from the concerned ministries before allocating the resources to the new companies.

41. Media reports suggested that the minister of water resources had deliberately allocated the water resources at old prices to the new companies, and in return some received kickbacks. However, the minister denied these charges. His counter argument was that he followed the stated policies of the Government and it is very difficult to price a scarce resource. He also said that the loss that the media is talking about is notional and in reality the Government and the citizens have gained by the entry of new players. Which of the following is the most appropriate inference?

- A If benefit to the citizens is higher than notional losses then it is not unethical.
- B If benefit to the citizens is lower than notional losses then it is unethical.
- C If benefit to the citizens is higher than actual losses then it is not unethical.
- D If benefit to the citizens is lower than actual losses then it is unethical.
- E All of the above A, B, C and D are inappropriate.

42. Subsequently, the minister questioned the role of the media in the whole affair. He said that the media cannot act like a reporter, prosecutor and judge at the same time. Mr. Swamy, an independent observer, was asked about appropriateness of the minister's opinion. What should be Mr. Swamy's reply?

- A Media has been rightly accused by the minister.
- B Minister's statement may be factually incorrect.
- C Media has rightly accused the minister.
- D Media has wrongly accused the minister.
- E None of above

43. Looking at the public unrest and discontent, the Government's anti-corruption branch was with the task of investigating the matter. Within a week's time the branch chargesheeted top corporate managers and the minister for wrong doings. Mr. Swamy was again asked to identify the guilty. Who should Mr. Swamy pick?

- A Only corporate managers.
- B Only the minister.
- C Only the Head of the nation.
- D All of the above.
- E None of the above.

Instructions [44 - 47]

Read the following caselet and choose the best alternative

The BIG and Colourful Company

You are running "BIG and Colourful (BnC)" company that sells books to customers through three retail formats:

- a. You can buy books from bookstores,
- b. You can buy books from supermarket,
- c. You can order books over the Internet (Online).

Your manager has an interesting way of classifying expenses: some of the expenses are classified in terms of size: Big, Small and Medium; and others are classified in terms of the colors, Red, Yellow, Green and Violet. The company has a history of categorizing overall costs into initial costs and additional costs. Additional costs are equal to the sum of Big, Small and Medium expenses. There are two types of margins, contribution (sales

minus initial costs) and profit (contribution minus additional costs). Given below is the data about sales and costs of BnC:

Sales		60000
Initial Costs		39000
Contribution (Sales - Initial Costs)		21000
Additional Costs		
Big	9300	
Small	3000	
Medium	3500	
		15800
Profit (Contribution - Additional Cost)		5200

Each of the Big, Small and Medium cost is categorized by the manager into Red, Yellow, Green and Violet costs. Breakdown of the additional costs under these headings is shown in the table below:

Expenses	Total	Red	Yellow	Green	Violet
Big	9300	5100	1200	1400	1600
Small	3000		400	2000	600
Medium	3500	400	1500	1400	200
Total	15800	5500	3100	4800	2400

Red, Yellow, Green and Violet costs are allocated to different retail formats. These costs are apportioned in the ratio of number of units consumed by each retail format. The number of units consumed by each retail format is given in the table below:

Retail Format	Red	Yellow	Green	Violet
Online	200	52	50	50
Supermarket	65	20	21	21
Book Store	10	30	9	9
Total	275	100	80	80

44. Read the following statements:

Statement I. Online store accounted for 50% of the sales at BnC and the ratio of supermarket sales and book store sales is 1:2.

Statement II. Initial Cost is allocated in the ratio of sales. If you want to calculate the profit/loss from the different retail formats, then

- A Statement I alone is sufficient to calculate the profit/loss.
- B Statement II alone is sufficient to calculate the profit/loss.
- C Both statements I and II are required to calculate the profit/loss.
- D Either of the two statements is sufficient to calculate the profit/loss.
- E Neither Statement I nor Statement II is sufficient to calculate the profit/loss.

45. What is the profit/loss from "online" sales? (Use data from previous question if needed)

- A 0
- B -310
- C +20
- D +388

E Cannot be determined from given information

46. Which retail format is least profit making for BnC?

A Online

B Supermarket

C Book Store

D All formats are loss making. E. All formats are profit making.

47. Which retail format gives the highest profit for BnC?

A BookStore

B Supermarket

C Online

D All are equally profitable.

E Cannot be determined from given information.

Instructions [48 - 49]

Read the following caselet and choose the best alternative

A teacher wanted to administer a multiple choice (each question having six choices) based quiz of high difficulty level to a class of sixty students. The quiz had sixty questions. The probability of selecting the correct answer for a good student and a brilliant student was 0.2 and 0.25 respectively. The poor students had no learning advantage. The teacher did not want students to cheat but does not have time and resources to monitor. All students were seated serially in 10 rows and 6 columns.

48. Is it possible for the teacher to detect cheating without monitoring? Choose the statement that best describes your opinion:

A It is not at all possible; teacher will have to introduce technology if there is no human support.

B It is always possible; but teacher has to calculate the exact answer.

C It is possible when many students sitting next to each other have the same incorrect answers for multiple questions. However, there can be a small error in judgment.

D It is possible when many students sitting next to each other have the same correct answers for multiple questions. However, there can be a small error in judgment.

E It is possible only for poor students but not for good and brilliant students. However, there can be a small error in judgment.

49. Three good students were seated next to each other. What is the probability of them having the same incorrect choice for four consecutive questions?

A $256/390625$

B $256/3125$

C $4/3125$

D 1/3125

E Cannot be calculated

50. Students from four sections of a class accompanied by respective class teachers planned to go for a field trip. There were nineteen people in all. However, on the scheduled day one of the four teachers and a few students could not join the rest. Given below are some statements about the group of people who ultimately left for the trip.

I: Section A had the largest contingent.

II: Section B had fewer students than Section A.

III: Section C's contingent was smaller than Section B.

IV: Section D had the smallest contingent.

V: The product of the number of student from each section is a multiple of 10.

VI: The number of students from Section C is more than 2.

VII: The product of the number of students from each section is a multiple of 24.

VIII: The largest contingent has more than 4 students.

IX: Each section contributed different number of students

The statements that taken together can give us the exact number of students from each section:

A 1, 11, 111, IV, VI

B 1, VI, VIII, IX

C 1, 11, 111, IV, V, VI

D 1, 11, 111, IV, VI, VII

E 1, IV, VI, VII, IX

51. There is a lot of interest in the first five ranks for Class XI students. One student guessed the rank order as Ankita, Bhagyashree, Chanchal, Devroopa and Esha. Later upon announcement of the results, it was found that not only did he get each student out off her true position, none of the students in his ranking correctly followed her immediate predecessor. Another student guessed Devroopa, Ankita, Esha, Chanchal and Bhagyashree. Even his guess was wrong. It was found that he had got two positions correct, and two students in his ranking correctly followed their immediate predecessors. Which of the following is true about the correct rank order?

A Ankita got the third position

B Bhagyashree got the fourth position.

C Chanchal got the second position.

D Devroopa stood first.

E Esha got the fourth position.

Instructions [52 - 55]

Read the following caselet and choose the best alternative:

Prof. Vijya, the chairperson of the Faculty Academic Committee (FAC), was trying to understand the implications of decisions taken by the Student Placement Committee (SPC) on placement issues.

It was alleged that Biswajit, a final year student, inflated his grades in his bio-data that was sent to the recruiters. The President of SPC requested the FAC to debar Biswajit from the campus recruitment process.

When the matter was brought up for discussion in FAC, one of the professors remarked that Biswajit too should be allowed to defend himself. When Biswajit arrived for the meeting the situation became even more challenging.

Biswajit raised the issue that many other students who had misrepresented grades to get coveted jobs had gone scot-free. He alleged that these students were close to the President of SPC and therefore, no action was taken against them. He stated that somebody has deliberately manipulated his grades in the bio-data.

This allegation confused the members and it was decided to adjourn the meeting. Vijya was to decide on the next course of action.

52. If you were Vijya what in your opinion would be the most appropriate action?

- A** Debar Biswajit and the President of SPC from the placement process as they have failed to uphold the rules of the SPC.
- B** Suspend Biswajit and the President of SPC.
- C** Constitute a fact finding committee to investigate the matter and ask them to submit a report to you within week's time.
- D** Apprise the corporate recruiters of the situation and assure them that corrective actions will be taken.
- E** Both options C and D.

53. It was found that a large section of the students have been indulging in such practices. Unfortunately, the HR manager of a much coveted campus recruiter, who is an alumnus of the college came to know about this. Considering yourself in the position of that HR manager, what would be your reaction?

- A** Express your displeasure and stop any further recruitment from the college.
- B** Talk to your contact in the college and try to find out the truth.
- C** Do not change anything and continue the process as if nothing has happened.
- D** Ask the college to send a fresh set of bio-data as you wanted verified grades of the students.
- E** Ask the SPC to resend the details of the shortlisted students including their verified grades.

54. As a potential entrant you are having an informal Facebook chat with one of the college seniors. You wanted to know about the pay packages of the graduating students. The senior replied that one will be able to understand this only after joining the college. He did not reveal any information but suggested that it is not very difficult to get a high salary job as you have already started networking. He also cautioned that you should not believe any rumors and you should directly contact the student body for any further information. What will be your most appropriate choice for seeking further information about placements?

- A** This conversation will increase your interest and you will network more with the students of the college for increasing your chances of getting a high salary job.
- B** You will contact the college authorities to get more insights about the placement process.
- C** You will start networking with the HR managers to understand their requirements.
- D** You will try to contact the President of SPC
- E** You will contact your other Facebook friends to find out about the placement activities at the college.

55. Vijya found that there were many such cases of grade inflation. She was giving final touches to the report when her attention was diverted by a phone call on her personal cell phone. It was from an unlisted number. The caller conveyed to her that it will be in her interest as well as in the interest of the college if the report is not presented to the Director. The caller also told her these findings will change nothing only result in bad publicity for the college. The caller identified himself as a well-wisher of the college before hanging up. Consider yourself in Vijya's position and choose an appropriate decision from the following choices.

- A** Disregard the phone call and do not share its details with others.
- B** Understand the implications of the phone call and apply for a leave.
- C** Call up the Director, tell him about the phone call, and excuse yourself from the responsibility.
- D** Talk to the Director and seek his opinion.
- E** Constitute a different committee to investigate the "phone call" and carry on with normal Activities.

Answers

31. A	32. E	33. C	34. E	35. C	36. B	37. C	38. A
39. B	40. C	41. E	42. D	43. D	44. C	45. D	46. B
47. A	48. C	49. E	50. E	51. A	52. C	53. D	54. B
55. D							

Explanations

31. **A**

The case does not give any reason to fire or demote Kale. The immediate course of action should be to investigate the accusations against Kale. If the charges are proved correct, Kale should be transferred as he can work effectively when working alone. In order to help Kale better, Marathe can suggest family counselling as a long term solution. Family problems may be affecting Kales work as well but there is nothing in the passage to suggest that. Hence the correct sequence is 2,1,5.

32. **E**

The only solution that pertains to family problem (since it deals with family issues) is mentioned in statement 5 of the previous question - " Marathe should suggest Kale to visit a family counsellor." Therefore if Marathe has to agree with Lakhote's opinion of not addressing the personal problems of employees then this solution (statement 5) becomes invalid. Hence the correct answer is option E.

33. **C**

Option A is negated because the major concern was Kale's inability to work competently in a team and not his conflicting responsibilities at home and office. Kale was facing personal problems at home and option B states that employees' problems at home affect their performance at work. This strengthens the argument rather than weakening it by citing one more reason to sack Kale. Option D is incorrect because if it holds true then it wipes out the possibility of sending Kale to some other location for work and does leave the management with the only option of sacking him. Option E is eliminated because it again strengthens the argument as the caselet clearly says that Kale was emotionally unstable. Option C is the correct choice as the report in the journal indicates that most managers find it difficult to work in a group. Even if Kale is sacked and a new manager is hired in his place, it is likely that the new manager may face the same problem (of not being able to work in a group). And hence it will not be a good business decision to sack Kale. Therefore, option C weakens the argument and is the correct answer.

34. **E**

Appreciation by boss can never be demotivating for an employee. It will rather boost the morale of an employee and motivate him to work to hard. Hence, Vardarajan's declining involvement cannot be attributed to the fact that his bosses appreciated him. Thus, option E is the most unlikely reason for his declining involvement in work. Options A, B, C and D, if true, could be considered as likely reasons for Vardarajan's disinterest in work and hence are incorrect.

35. **C**

Since Vardarajan does not find his work challenging so the first step that should be taken to motivate him will be to give him a more challenging assignment. Next step in the series would be to transfer him from the Projects Department to Training Department so as to give him a change of roles and responsibilities. This may prove to be beneficial as he would get a break from his routine tasks and will have an opportunity to explore new avenues. If all this fails then the best possible thing will be to give him a long break from work and send him on a vacation for two months. This will give him time to for self introspection and he can start afresh when he joins back. Hence, the sequence will be 1,2,3. Statement 4 is irrelevant as Vardarajan is not facing this kind of problem at work.

36. B

Option A is incorrect because promoting Vardarajan will not address the issue at hand. The problem can only be addressed by keeping the performance assessment system transparent and by ensuring impartiality in reviewing performance of each employee. Thus, the correct answer is given by option B. Options C, D and E are negated for the same reason as A i.e. the issue cannot be resolved by addressing Vardarajan's case alone but by fairly judging the performance of all the employees in the organization.

37. C

Loss of retail customers does not necessarily mean loss of revenue. It is important to understand that this reduction in retail customers may be by design and an organizational objective. The organization may have been trying to shift its customer base from retail to commercial and their success in doing so can account for the increase in revenue. Hence answer choice C is correct.

38. A

The reason why doctors have not embraced the surgery has to be linked to its potential side effects. Answer choice A tells us that the surgery can result in serious complications including death and this is a reason enough for the doctors to not recommend its use. Options B and C tell us the prevalence and effects of obesity which do not explain why doctors are wary of the discussed mode of treatment. Option D talks about how other methods like dieting are not very effective. Option E is irrelevant as it talks about cost and financing, something which the doctor may not be concerned with.

39. B

Shambu's initial success was due to the latent anger in the people and Shambu's moral courage to stand up against corruption. Raising income level was not the reason for Shambu's initial success. Also, Shambu became the darling of the media once he was successful. It has not been given that media aided in furthering Shambu's struggle against corruption.

Points 1 and 2 played a pivotal role in Shambu's initial success. Therefore, points 3 and 4 are unlikely to be the reasons for Shambu's initial success and hence, option B is the right answer.

40. C

Option B is false as state of Sambhu cannot be decided according to the paragraph.

In the last line of the second paragraph it is mentioned that " He used this opportunity as a platform to spread the message that only citizens with an unblemished character should be allowed to hold a public office." Thus Sambhu was not directly involved in the politics, he just uses the stage to garner support, which might be the reason for decline.

Option D and E are trivial.

Option C is correct

41. E

The minister has stated that the loss is notional and in reality, the projects have benefited everyone. Options C and D talk about actual losses. The minister has not made any statement regarding the loss. Therefore, we can eliminate options C and D. Options A and B talk about notional losses. Again, notional losses should not be a factor deciding whether a project should be implemented or not. We can eliminate options A and B as well. None of the given statements are valid inferences and hence, option E is the right answer.

42. **D**

From the statements of minister and his answers to the questions raised by the Head of the nation, it is clear that the minister has allocated resources following the rules set by the government and there is no partiality or irregularities have taken place. So, Media has wrongly accused Minister.

Option A is wrong as we can't define a boundary to media.

There is no support to validate claims in option B.

Option C is wrong.

Option D is correct answer.

43. **D**

The correct answer to this questions should have been 'both corporate managers and the minister'. The head of the nation should not have been accused as he was the one to identify the discrepancy in the allotments. Since the correct answer is not given in the answer choices, XAT picked option D as the correct answer.

44. **C**

Sales for online = 50% of 60000 = 30000

Remaining sales = 60000-30000 = 30000

The ratio of supermarket sales and book store sales is 1:2

Supermarket sales = $(30000 \times 1)/3 = 10000$

Bookstore sales = $(30000 \times 2)/3 = 20000$

Profit = Sales - Initial costs - Additional costs

Sales and Additional costs can be calculated from the table. But no information about distribution of initial costs among different retails formats. From statement 2 the distribution of initial costs is clear.

Hence both statements will be used to calculate profit for different retail formats.

45. **D**

Sales from online = 50% of total sales = 50% of 60000 = 30000

Initial costs for online = 50% of total initial costs (Initial cost is allocated in ratio of sales)
= 50% of 39000 = 19500

Additional costs = Red + Yellow + Green + Violet for online)(1)

Total red costs = 5500

Red costs for online = $5500 \times (200/275) = 4000$

Similarly,

Yellow costs for online = $3100 \times (52/100) = 1612$

Green costs for online = $4800 \times (50/80) = 3000$

Violets costs for online = $2400 \times (50/80) = 1500$

Addition costs for online = $4000+1612+3000+1500 = 10112$ From (1)

$$\text{Profit} = \text{Sales} - \text{Initial costs} - \text{Additional costs} = 30000 - 19500 - 10112 = 388$$

46. B

$$\text{Sales from online} = 50\% \text{ of total sales} = 50\% \text{ of } 60000 = 30000$$

The ratio of supermarket sales and book store sales is 1:2

$$\text{Supermarket sales} = (30000 \times 1) / 3 = 10000$$

$$\text{Bookstore sales} = (30000 \times 2) / 3 = 20000$$

$$\begin{aligned} \text{Initial costs for online} &= 50\% \text{ of total initial costs} && (\text{Initial cost is allocated in ratio of sales}) \\ &= 50\% \text{ of } 39000 = 19500 \end{aligned}$$

$$\text{Initial costs for supermarket} = (19500 \times 1) / 3 = 6500 \quad (\text{Initial cost is allocated in ratio of sales})$$

$$\text{Initial costs for bookstore} = (19500 \times 2) / 3 = 13000$$

For online:

$$\text{Additional costs} = \text{Red} + \text{Yellow} + \text{Green} + \text{Violet} \quad \text{for online)(1)}$$

$$\text{Total red costs} = 5500$$

$$\text{Red costs for online} = 5500 \times (200 / 275) = 4000$$

Similarly,

$$\text{Yellow costs for online} = 3100 \times (52 / 100) = 1612$$

$$\text{Green costs for online} = 4800 \times (50 / 80) = 3000$$

$$\text{Violets costs for online} = 2400 \times (50 / 80) = 1500$$

$$\text{Addition costs for online} = 4000 + 1612 + 3000 + 1500 = 10112 \quad \text{From (1)}$$

$$\text{Profit} = \text{Sales} - \text{Initial costs} - \text{Additional costs} = 30000 - 19500 - 10112 = 388$$

For Supermarket:

$$\begin{aligned} \text{Additional costs} &= \text{Red} + \text{Yellow} + \text{Green} + \text{Violet} \\ &= 5500 \times (65 / 275) + 3100 \times (20 / 100) + 4800 \times (21 / 80) + 2400 \times (21 / 80) = 3810 \end{aligned}$$

$$\text{Profit} = 10000 - 6500 - 3810$$

$$= -310$$

For Bookstore:

$$\begin{aligned} \text{Additional costs} &= \text{Red} + \text{Yellow} + \text{Green} + \text{Violet} \\ &= 5500 \times (10 / 275) + 3100 \times (30 / 100) + 4800 \times (9 / 80) + 2400 \times (9 / 80) \end{aligned}$$

$$\text{Profit} = 20000 - 13000 - 1940 = 5060$$

Supermarket is making least profit for BnC.

47. A

$$\text{Sales from online} = 50\% \text{ of total sales} = 50\% \text{ of } 60000 = 30000$$

The ratio of supermarket sales and book store sales is 1:2

$$\text{Supermarket sales} = (30000 \times 1) / 3 = 10000$$

$$\text{Bookstore sales} = (30000 \times 2) / 3 = 20000$$

$$\begin{aligned} \text{Initial costs for online} &= 50\% \text{ of total initial costs} && (\text{Initial cost is allocated in ratio of sales}) \\ &= 50\% \text{ of } 39000 = 19500 \end{aligned}$$

Initial costs for supermarket = $(19500 \times 1)/3 = 6500$
of sales)

(Initial cost is allocated in ratio

Initial costs for bookstore = $(19500 \times 2)/3 = 13000$

For online:

Additional costs = Red + Yellow + Green + Violet for online)(1)

Total red costs = 5500

Red costs for online = $5500 \times (200/275) = 4000$

Similarly,

Yellow costs for online = $3100 \times (52/100) = 1612$

Green costs for online = $4800 \times (50/80) = 3000$

Violets costs for online = $2400 \times (50/80) = 1500$

Addition costs for online = $4000 + 1612 + 3000 + 1500 = 10112$ From (1)

Profit = Sales - Initial costs - Additional costs = $30000 - 19500 - 10112 = 388$

For Supermarket:

Additional costs = Red + Yellow + Green + Violet

$$= 5500 \times (65/275) + 3100 \times (20/100) + 4800 \times (21/80) + 2400 \times (21/80) = 3810$$

Profit = $10000 - 6500 - 3810$

$$= -310$$

For Bookstore:

Additional costs = Red + Yellow + Green + Violet

$$= 5500 \times (10/275) + 3100 \times (30/100) + 4800 \times (9/80) + 2400 \times (9/80)$$

Profit = $20000 - 13000 - 1940 = 5060$

Bookstore gives highest profit for BnC.

48. C

As the probability of getting incorrect answers is quite high in comparison to getting right answers for the students of the class in the test, in case students sitting next to each other go for cheating, then probability of them getting same incorrect answers for multiple questions is quite high. Therefore, by tracking pattern of incorrect answers, it is possible to detect whether cheating took place or not.

49. E

Probability of the first student of the group of three getting 4 incorrect answer of 1st question = $\frac{4}{5}$

Probability of the second student of the group getting the same incorrect answer of 1st question as that of the first student = $\frac{4}{5} \times \frac{1}{5}$

Probability of the third student of the group getting the same incorrect answer of 1 st question as that of the first student = $\frac{4}{5} \times \frac{1}{5}$

Therefore, the probability of all the three getting same incorrect answer of 1st question = $\frac{4}{5} \times \frac{4}{5} \times \frac{1}{5} \times \frac{4}{5} \times \frac{1}{5} = \frac{4^3}{5^5}$

Hence, the probability = $\left(\frac{4^3}{5^5}\right)^4$

50. E

Option A: we get that $A > B > C > D$ and $C > 2$

Option B: we get A is the largest, $C > 2$, $A > 4$ and every section has a different number of students.

Option C: we get that $A > B > C > D$, $C > 2$ and $A * B * C * D = 10n$

Option D: we get $A > B > C > D$, $C > 2$ and $A * B * C * D = 24n$

Option E: we get A is the largest, D is the smallest, $C > 2$, $A \cdot B \cdot C \cdot D = 24n$, and each section has a different number of students.

Statement 9 tells us that each section contributes a different number of students and thus this statement is a must in figuring out each section's strength.

Thus, options A, C and D are eliminated. From option B we cannot figure out any value since we don't have any relation between their values. Hence, option B is eliminated.

Option E tells us about the largest and smallest section, also provides a relation between all their values which can be used to find out possible solutions and also tells us that each section contributes a different number of students which can be used to eliminate the undesirable results.

Thus, option E is the answer.

51. A

We have been given that A, B, C, D and E are not holding the 1, 2, 3, 4 and 5 ranks, respectively.

Also that two of the positions in the arrangement DAECB are correct and the other two follow their immediate predecessors.

The only arrangement satisfying both these conditions is EDACB.

Thus, option A is the correct answer.

52. C

The caselet presents a complicated problem making it difficult to find out the guilty. The best way to proceed in cases like these is to launch an investigation into the matter so as to find out that who is at fault. Thus, the most appropriate course of action to be followed is presented by option C - Vijya should constitute a fact finding committee to investigate the matter and then decide about the next step to be taken. Options A and B are inappropriate because these steps could be taken only after finding out the person at fault. Option D is eliminated as involving the corporate recruiters in the matter will only aggravate the issue and bring a bad name to the college. An effort should be made to try and solve the problem internally rather than publicizing it.

53. D

Option D is the correct answer. It is advisable to start from the scratch and shortlist candidates from the fresh set if bio-data. Since the fresh set contains the verified grades of the students so there are no chances of any discrepancy this time. Option A is incorrect as it is an extreme step and should not be taken when there is an option of screening the candidates again. Option B can be negated because the HR managers's contact may not have the correct information. Furthermore it does not address the problem of recruitments from that college. It is unethical for an HR manager to recruit candidates even after knowing that the information presented in their bio-data's is not authentic. This will show his disloyalty towards the organization. Option E is incorrect as it reduces the pool of students to be recruited from.

54. B

On being asked about information regarding pay packages of graduating students, the senior does not reveal much information and rather cautions you not to believe in any sort of rumors. He also said that for any further information the college authorities should be contacted directly. Thus option B presents the most suitable course of action for seeking further information about placements. Option A is incorrect because the senior has already warned you that believing in rumors will do you no good. The information that you get by networking with students may not be authentic. Option C can be eliminated because contacting the HR managers is beyond the purview of discussion held between the potential entrant and the senior. Option D is incorrect because the senior has advised to contact the student body and not any individual representing the body. Approaching the President directly may not prove to be of any help. Option E is negated for the same reason as option A.

55. **D**

Option A is inappropriate as it will be unprofessional on Vijya's part to suppress this information by not paying heed to the phone call. Options B and C are negated because it is unethical to shrug off the responsibility by absenting oneself from work or by putting it on someone else. Option E is eliminated as it is not feasible to constitute a committee for every issue. Furthermore, this will only prolong things and will delay the matter. Option D is the correct answer. Since the matter cannot go unreported so it is advisable to consult the Director (Vijya's senior) and seek his opinion on the issue.