

XAT-2016
EXPLANATORY
ANSWERS

SECTION-I — VERBAL AND LOGICAL ABILITY

1. According to the sentence, only by looking at the ingredients one cannot assume that it is a gourmet recipe and hence will taste good. Only if the final taste is good can we be sure if the ingredients were used to make a tasty dish. Thus [A] which means ‘something which if of good quality needs no advertisement’ is incorrect. [B] means children inherit the characteristics of their parents and is incorrect for a recipe. [C] means that problems along the way do not matter if the outcome is happy. Since the given sentence is in reference to a recipe and its ingredients, [C] is incorrect. [D] means that man is responsible for the effect of his actions and hence cannot be used in the given context. [E] means you don’t know the quality of something until you have experienced it and is analogous to the given statement. Hence, [E].
2. According to the poem, you will not find your soul anywhere outside yourself. You might discover beauty but not the answers that you search. Though the ways to the heart are narrow, you will get insights only within yourself. Thus [A] is incorrect as the poet does not mention that what he saw outside was deceptive. [B] generalizes the statement about narrow path and broad roads which is not the intention of the poet. According to the poet, the path to search within yourself is narrow. [C] correctly summarizes the intention of the poet. [D] negates the second line of the last stanza which mentions that the heart’s path is narrow. [E] is partly correct as though light offers insight, this light is not from any external source but your own realisation. Hence, [C].
3. ‘Vivisect’ means to dissect the living body of an animal for investigation. [A] is incorrect as ‘observe’ does not mean to ‘enquire’. ‘Explore’ means ‘to examine or investigate systematically’ which can be done by inquiry. ‘Interrogate’ means ‘to ask questions’ while ‘investigate’ means ‘to study or inquire systematically’. Thus [C] does not have a similar relationship to the given pair. Though ‘query’ can be used for a ‘survey’, the opposite is not true. Thus the relationship is inverted in [D] and can be negated. [E] is also incorrect as it has an antonymous relationship which is not similar to the given pair. Hence, [B].
4. ‘Immorality’ or ‘dishonesty’ are not aggressive behaviours and thus [A] can be negated. Though ‘crime’ is an ‘illegal behaviour’, ‘sin’ or ‘wickedness’ are not ‘illegal’. Thus [B] can also be negated. ‘Banned’ means ‘prohibited’. Though the italicized words are despised by all, they have not been banned. Thus [D] is also incorrect. ‘Vetoed’ also means ‘prohibited emphatically’ and thus [E] can also be negated for the same reason. ‘Deviant’ means ‘departing for the norm’ and correctly captures the various behaviours mentioned. Hence, [C].
5. [A] can be inferred from the first sentences of both Oinos and Agathos. Since Oinos mentions about the final overthrow (which means ‘defeat’) of the earth, [B] can also be inferred from the conversation. According to Oinos, natural laws gave rise to the appearance of creation which was used by some philosophers to create the animalculae. Thus [C] can also be inferred from the given information. [D] cannot be inferred since philosophers have termed the creations as natural laws but natural laws have not been created by philosophers. [E] can be inferred from the last sentence of Agathos. Hence, [D].
6. What statement I means is that offices and positions should go to those marginalized sections who have greater savings. However, [A] changes the meaning by hinting that marginalized sections are incapable of savings. Thus [A] can be negated. [B] correctly captures the meaning of statement II. ‘Meritocracy’ means ‘an elite group of people whose progress is based on ability and talent’. However, since the statement are specific to marginalized sections, they cannot be an elite group. Thus [C] is incorrect. Though [D] talks about equal opportunity, intelligence cannot be inferred from statement II. Thus [D] can be negated. [E] is incorrect as ‘subsidies’ have no relation to ‘savings’. Hence, [B].
7. According to the author, the survival of a country does not depend either on politics or on the Prime Minister. [A] is incorrect as nothing has been mentioned about economic growth in the country. [B] is also incorrect as nothing has been mentioned about the population of the country. [C] contradicts the conclusion of the author as mentioned in the last sentence. Since the author mentions about the survival of the country despite any political textures, [D] will strengthen his conclusion. [E] is incorrect as the author mentions the political texture with respect to the survival of the country and not that of the Prime Minister. Thus [E] can also be negated. Hence, [D].
8. Since the sentence begins with we trust a particular agent or group of agents, it does not imply that he or they will cheat on us. Thus [A] can be negated. [B] is correct as we can consider working or entrusting work with someone whom we trust. Since the last part mentions how trust affects us, his engagement in negative behaviour

XAT

- cannot be the last part of the sentence. Thus [C] can also be negated. [D] is also incorrect as someone we trust is not possible of aggression against us. [E] is incorrect as he is performing an action for us and so there is no reason for us to attack him. Hence, [B].
9. There is a clear R-6 link as R mentions insufficient evidence while 6 continues the same line of thought of not having enough evidence to verify if he was really killed in a battle. There is also a 1-S link as 1 mentions you knew someone called Smith and S mentions you had heard that he was killed in a battle. This is followed by P-Q as P mentions what mentions about what a third person says about Smith being in Cambridge and then you inquire about it in Q. Thus the correct order is 1-S-P-Q-R-6. Hence, [A].
 10. 1 mentions that 'symmetry' needs to be defined. But R asks how we can define something which is symmetrical. This should be followed by Q as it mentions why symmetrical things cannot be defined. There is a clear S-P link as S mentions professor Weyl's definition of symmetry and P gives an example of the same. This can be concluded by 6 since the author mentions adopting Weyl's definition of symmetry. Thus the correct order is 1-R-Q-S-P-6. Hence, [D].
 11. Nothing in the passage mentions that cricket is more popular in India than in the Latin American countries. Thus [A] can be negated. The last sentence only mentions the popularity of football and not its success. Thus [B] can also be negated. The second sentence mentions that most successful coaches were from Latin America while the first sentence mentions that India has lost most football matches recently. However, it cannot be inferred that the matches were lost only due to the absence of a Latin American coach. Thus [C] also cannot be inferred from the paragraph. Nothing has been mentioned about European coaches in the passage and thus [D] can be negated. [E] cannot be definitely inferred from the passage as it talks only about the popularity of sports and not that of producing a better coach. Hence, [E].
 12. 'Sobriquet' is a French word which means 'a nickname'. It is pronounced as 'soh-bruh-key'. Hence, [A].
 13. The last sentence of the first passage clearly states that markets by themselves do not lead to efficiency. Since this is the matter being discussed, only option [A] correctly indicate 'matters'. Hence, [A].
 14. [A] can be inferred from the last sentence of the passage which mentions the instability caused by free flow of short term capital. Insurance market has been given as an example where economic efficiency is missing. Thus [B] can also be inferred from the first sentence of the paragraph. [C] can be inferred from the second sentence of the last paragraph which mentions the difficulty in getting the correct interpretation of economies in any country. [D] can be inferred from the penultimate sentence of the first paragraph. Though the third sentence of the last paragraph mentions that the East Asian countries actually did what economic theory suggested, nothing has been mentioned about incomplete information. Hence, [E].
 15. Since paragraph II explains the questions raised in paragraph I, they cannot be unrelated to each other. Thus [A] can be negated. [B] is incorrect since the Asian markets are given as an example of the success of economic theory and not vice versa. [C] correctly captures the relationship between the two paragraphs. Paragraph I only explains the limits of the markets and only in the end does it only asks a rhetorical question. Thus [D] is also incorrect. Though paragraph I states an economic theory, paragraph II gives information to support it and not refute it. Thus [E] can also be negated. Hence, [C].
 16. 'Complementary' means 'forming a balanced whole' which is incorrect in the context of bowling. 'Contiguous' means 'in contact' and cannot be used in the given context. 'Conforming' means 'adapting or adjusting' and cannot be used for the target audience. 'Compatible' means 'living together in harmony' and thus incorrect. In the given context, 'interchangeable' means 'comparable' to static pins. Hence, [E].
 17. Only [A] is close to the necessary condition of communication as mentioned in the second sentence of the penultimate paragraph and also in the last sentence of the passage. Though the first sentence of the sixth paragraph mentions communication to be simultaneous and collaborative in nature, it is not the main condition. Thus [B] can be negated. Nothing is mentioned about [C] or [D] in the paragraph and thus they can be negated. Eliciting a response is given in context to getting a correct answer in the play of dumb charades. Thus [E] is also incorrect. Hence, [A].

18. Nothing has been mentioned as a possibility of appeal though the rules are clearly mentioned. Thus [A] can be negated. Similarly, nothing has been mentioned about the receiver predicting the spin. Thus [B] can also be negated. [C] can be inferred since the author mentions about a partner (thus limited number) and also the rules of dumb charade are fixed. Though the first part of [D] is correct, it is not passive as bowling since it requires interpersonal communication. Thus [D] can also be negated. [E] is incorrect since nothing has been mentioned about dumb charades having multiple balls in the game. Hence, [C].
19. Advertising is an action, the negotiation between buyer and seller is the interaction while the bidding is a transaction. Thus [A] is closest to action, interaction and transaction. [B] is incorrect since engaging in door to door canvass is not a form of transaction but it is a form of interaction. Writing the MBA exam is not interaction and facing the interview is interaction but not transaction. Thus [C] can also be negated. [D] is incorrect as driving a car is not a transaction. Negotiating overseas posting is an interaction while applying for a visa is an action. Thus the order is reversed in [E] and it can be negated. Hence, [A].
20. According to the passage, our knowledge is limited though we are aware that there are many things which we do not know. Thus only [D] is incorrect since nobody can be sure about the things that they do not know. According to [A] and [C], one is aware of the things that one knows. Thus they are correct according to the passage. [B] means that there are some things that you do not know and are aware of it. [E] is not in the purview of the passage as it talks about others while the passage talks about oneself. Hence, [D].
21. [A] can be concluded since both the statements are true but under different conditions. [B] can also be concluded from the last three sentences in the penultimate paragraph. [C] is exactly what is mentioned in eleventh sentence of the penultimate paragraph. [D] can also be concluded since the last sentence of the passage states that even a small effect can have profound changes philosophically. However, [E] cannot be concluded as the last sentence of the second paragraph only mentions the difference between theoretical and experimental physicists but nothing beyond that. Hence, [E].
22. Experimental physicists first experiment. But since the Big Bang has not been experimented with till now, [A] and [C] are incorrect. [B] is correct since theoretical physicists could have imagined or guesses or deduced the theory. Nothing can be concluded about the relationship between philosophers and the Big Bang theory. Thus [D] can be negated. Also, nothing has been written about the truth or approximation of the Big Bang theory. Thus [E] can also be negated. Hence, [B].
23. According to the last sentence of the first paragraph, consciousness is necessary for existence and not perception. Thus [A], [B] and [C] can be negated. *Conditio sine qua non* means 'an indispensable and essential condition'. The passage talks about existence in general and does not distinguish between things and persons. Also, it is not necessary to know things or persons for existence. Thus [E] can also be eliminated. Hence, [D].
24. The last sentence of the penultimate paragraph clearly mentions a thing's actions are determined by its nature. Hence, [E].
25. According to the passage, your existence is your identity while consciousness (the awareness of your existence) is the identification. Though a college can be your identity, the perception (which means 'understanding') of cultural events cannot be your identification. Thus [A] is incorrect. Similarly, taxation or children or campus placement cannot be your identification. Thus [C], [D] and [E] can be negated. The consciousness of Twitter as your identification is the correct analogy. Hence, [B].
26. According to Francis Bacon, nature can only be used for our purposes if we act according to nature. Thus [A] and [D] which mention reality and obstacles can be negated. [B] is incorrect as the statement talks about 'commanding' nature while [B] negates this possibility. If nature was superior to humans, we would not be able to command it. Thus [C] can also be negated. Only [E] is the correct interpretation of Francis Bacon's statement. Hence, [E].

SECTION II — DECISION MAKING

27. Random inspection by the police is not likely to increase the comfort of the passengers since it will be subjective to the comfort levels as determined by the police and not the passengers. Thus [A] can be negated. [B] and [E] are assumptions on part of the mayor since there is no information given in the passage which strengthens this belief. Thus both the options can be negated. Since the mayor is concerned about the comfort and safety levels for all passengers, [C] is incorrect since it only caters to the rich customers. [D] is the correct course of action as the feedback about the comfort of the passengers can be recorded directly. Hence, [D].
28. The mayor of Yashmund, feels that most taxis do not offer sufficient comfort and safety to passengers. However, if the owners of these taxis offer sufficient comfort and clear a comfort-inspection, then customers would be willing to pay more. To offer this higher comfort level, the taxi owner would be allowed to charge 25 % more than normal fares. Also, owners of the taxis found compromising on safety would be jailed. Thus, it would be a win-win situation for all parties concerned. Hence, [D] is the best option that is most likely to convince the owners. As “impeccable safety record” or “consistent record of comfort” cannot be suitably measured, [A] and [C] are incorrect. Moreover, [A] and [C] along with [B] do not place any conditions or liabilities on the owners in case of any shortcomings in services offered. Thus, they can be negated. [E] talks about violation of traffic rule while the discussion is about comfort and fares. Hence, it is incorrect. Hence, [D].
29. Since the land is a green belt, to reduce the harmful pollution from the factory, [A] is the correct course of action as it will give Ghosh the land and at the same time reduce pollution by planting trees around the factory and city. [B] is incorrect as planting only 20 trees (since only 20 locals will be employed) and in the locality of the employees will not reduce the pollution of the factory. [C] and [E] are incorrect as they will mean that the green cover will be lost and pollution will increase which will be detrimental to the city as a whole in the long run. [D] is incorrect as shifting the green belt to other part of the city will not reduce the pollution from the factory. Hence, [A].
30. Since Ghosh has to convince Chatterjee not to pursue the green policy, [A] is incorrect as it is only suggesting to defer the green policy for three years. [B] is the correct course of action as it would convince Chatterjee to work on the agenda that he had promised. Only warning, appealing or threatening Chatterjee about various possibilities will not necessarily stop him from implementing the green policy. Thus [C], [D] and [E] are incorrect. Hence, [B].
31. According to the scheme, extra benefits were given to researchers with new publications. [1] is incorrect as it does not relate to new publications but the number of researcher who left the organisation. [2] is not relevant to the scheme of new publication. [3] correctly describes the reason why the government would want to discontinue the new scheme. [4] talks about the decrease in the number of readers which would not affect the benefit scheme. Hence, [C].
32. [1] and [2] are incorrect as they talk about researchers in other parts of the world which does not have connection with the institute. [3] is also incorrect as the highest paid researcher had won the Nobel Prize last year and it does not justify how the scheme helped him. Hence, [E].
33. According to the last statement, an auditor’s role is to verify accounts. Thus only [2] which mentions a sudden increase in expenditure is within the ambit of the auditors. The director will agree with [1] since it is an extra-benefit scheme which is not in the purview of the auditors. The director will also agree with [3] since it is a policy level decision which need not be consulted with the auditors. Hence, [D].
34. [A] is the correct step of action as it would allow Kamal to charge more as he will introduce a new and specialized service which does not have any price decided in the agreement. [B] is incorrect as even if Kamal opens another shop, it would still be owed by him and thus he will have to stick to the agreed prices. Even if people want to jump the queue, Kamal would still be providing the same services whose price is decided in the agreement. Thus [C] is incorrect. Giving the next service free will not help Kamal since he is charging the same price as agreed yet giving the next service free. Thus [D] is also incorrect. Even if he opens or closes his shop two hours before or later, the services will still remain the same so he cannot charge extra for same services. Thus [E] is also incorrect. Hence, [A].

35. Charging differential rates for the same services will void the agreement. Thus [A] and [B] are incorrect. Making a visit free may not be a good idea for his business as he is still giving them the regular services. Thus [C] is wrong. [D] is also incorrect as he is worried about losing his loyal customers with the charges that were decided upon. Thus only [E] is the correct option to choose without violating the agreement. Hence, [E].
36. Project M will satisfy Khan as it has all 3 facilities i.e. Recreation Club, place for morning walk and car parking.
Project N will satisfy Yadav as price is under 50 lakhs and distance to office less than 10 km.
Project P will not satisfy Bhatia and Singh as price is above 50 lakhs.
It will not satisfy Patel and Yadav as distance to office > 15 km.
It will not satisfy Khan and Lingdo as there is no recreation club.
So project P will not satisfy any of the 6 persons.
Hence, [C].
37. Project M satisfies Patel, Khan and Lingdo
Project N satisfies only Yadav
Project O satisfies only Singh
Project P does not satisfy any person.
Project Q satisfies Patel, Yadav and Lingdo.
Project R satisfies only Yadav
Project S satisfies Patel, Yadav and Lingdo.
So, only Project M, Q and S satisfy 3 of the given 6 persons.
Hence, [D].
38. There will be no impact on Project M as it had already has Car Parking and Recreation Club. So 3 people will not be satisfied by Project M.
If car parking facility and recreation club is added to Project N, then it will satisfy Patel, Khan, Yadav and Lingdo. So 2 people will not be satisfied.
Project O will satisfy only Khan, Singh and Lingdo. So 3 people will not be satisfied.
Project P will only satisfy Khan and Lingdo. So 4 people will not be satisfied.
Project Q will only satisfy Patel, Khan, Yadav and Lingdo. So 2 people will not be satisfied.
Project R will only satisfy Patel, Khan, yada and Lingdo. So 2 people will not be satisfied.
On Project S there is no impact as it already has a car parking and recreation facility. Exactly 3 people are satisfied and 3 people are not satisfied. So for projects N, Q and R at most 2 persons will not be satisfied. Hence, [A].
39. It is the duty of the police to prevent crimes. Thus they have not foiled the burglary attempts because of the said practice. Hence, [A] can be negated. A bribe need not necessarily be large in number. Thus even two pieces of sweet will be considered as a bribe. Thus [B] will strengthen his conviction and not weaken it. Even [C] will strengthen Ratan's conviction as the policemen would not come without getting anything in return. [D] is the correct argument as sending sweets to a school, an orphanage or a temple is not a form of bribe. [E] is only comparing other shopkeepers practice with Purushottam and will not convince Ratan. Hence, [D].
40. [1] is a correct argument as the sweets were still edible and have not crossed their expiry date. Since Ratan is concerned about the consequences of eating these sweets, [2], [3] and [5] are incorrect as no consequence is mentioned after buying the sweets. [4] is the correct argument since it mentions that there has been no complaint after eating these sweets (which is the consequence) for 30 years. Thus both [1] and [4] are valid argument to convince Ratan. Hence, [B].
41. Since Purushottam mentions having personal connect with these customers, the income from them would not matter to him. Thus [1] can be negated. [2] shows that these customers are not loyal to *Puru and Sons* and can thus be used to convince Purushottam. Not greeting Purushottam or recognising him has got nothing to do with the fact that they are important and loyal customers. Thus [3] can be negated. Attending a marriage is a personal choice while doing business is an entirely different matter. Thus [4] is completely wrong. [5] is

XAT

- correct because if they are using the sweets from *Puru and Sons* for others, it would display their disloyalty to the shop. Thus both [2] and [5] are likely to convince Purushottam to charge market price. Hence, [C].
42. If [1] is carried out first, it would mean that the report was correct and further damage the company's image. Thus [1] is not the first step. Hence, [C] and [D] can be negated. [2] should be preceded by [3] since only if new report show correct findings can the findings be made public. Also, [3] should be the immediate step as one needs to verify the correctness of the report. Thus [3] followed by [2] is the correct order of action. [2] should be followed by [4] so that such incidences do not occur. [5] is an incorrect option as though the retailers and distributors may get higher incentives, it is not necessary that the public will buy the company's goods. Hence, [B].
43. The most ethical step is to test the veracity of the report. Thus [6] has to be the first step. This negates [C], [D] and [E]. Both [5] and [1] are unethical and thus [A] can also be negated. However, [4] is the lesser evil amongst [1] and [5]. Thus [4] should precede [1] in ethics. Thus only [B] has the wrong order. Hence, [B].
44. Only proclaiming over the media about the safety of their product will not help the public to ascertain the truth about the report. Thus [A] is incorrect. Ascertaining the quality of the competitor's product will not help *Crunchy Chips* to bounce back since the report only mentions *Crunchy Chips'* product. Thus [B] is also incorrect. Though [C] can be considered, Rajan does not know the outcome of the test to make it public. Thus it may or may not help *Crunchy Chips*. [D] is incorrect as Rajan does not have proof of the competitor's involvement. [E] is correct as it will help the public to know that the report of the food testing agency is not true. Hence, [E].
45. [1] is an inappropriate action since the company has already invested in these individuals for a year and to fire them now would mean losing trained employees and hiring new ones and train them again. [2] is an appropriate action since Amelia is already disappointed with their performance. [3] is an inappropriate action as imposing a pay-cut but giving them relatively high ranking are contradictory actions. [4] is the most appropriate action as giving them relatively poor ratings will prompt them to improve their performance. [5] is the least appropriate action as Amelia cannot give them high ratings inspite of being unhappy with their performance. [A] and [B] can be negated as [4] is not the least appropriate action but the most appropriate. [E] is also incorrect as [5] is not the most appropriate action. [D] is also incorrect as [3] is an inappropriate action. Hence, [C].
46. Amelia cannot be lenient with the trio since if their performance is not up to par, even Amelia's work will suffer. Thus [A] can be negated. [B] is an unethical option as it does not help to improve the trio's performance. [C] will also not help the improvement of the trio's performance. [D] is also incorrect as a boss is responsible for getting the work done from his/her subordinates and his/her performance is in many ways linked to that of his/her team. [E] is correct as her boss will become aware of the standing of the organization in the trio's eyes. Hence, [E].
47. Informing higher authorities is not the right step as finally it is Amelia's team and she needs to give Nicky another chance to prove herself. Thus [1] is incorrect. Since the training is marked for top performing employees, Nicky does not qualify to be a part of that training as her performance is disappointing. Thus [2] is also incorrect. [3] is the right step as it will help Nicky to understand that she has to improve her performance and at the same time give her another chance to prove herself. [4] is incorrect as the ratings need to be given only on the basis of their work and not outside it. [5] is also correct as their performances are well. Thus only [3] and [5] are the most appropriate options. Hence, [E].

Answers for questions 48 and 49:

Let us prepare a table of profit earned per month from 1000 units for each of the crops.
All figures mentioned below are in USD.

Crop	C.P. Per Unit	S.P. Per Unit	Profit Per Unit	Total Profit (A)	No. of Months for Harvest (B)	Profit per month (A/B)
A	20	60	40	40000	2	20000
B	5	55	50	50000	2	25000
C	25	70	45	45000	3	15000
D	15	75	60	60000	3	20000
E	5	65	60	60000	4	15000
F	35	75	40	40000	4	10000

To maximize profit we should allocate land to a crop in descending order of profit per month. So ideally land should be preferably allocated in the order: B, D and/or A, C and/or E, F such that land is left fallow for least possible time.

48. Since there is no restriction on repeating a crop, we should use crop B maximum possible times. If we cultivate crop B, a total of 3 times from April-September, then October has to be left fallow. Now, we have the option of cultivating F in November or A in January.
 In both cases total profit earned will be $3 \times 50000 + 1 \times 40000 = \$1,90,000$
 If we cultivate B twice in a row from April-July, then soil has to be kept fallow for September. The crop which gives us the best return after B is crop D or crop A. Out of both these crops, D can be cultivated from September to November. The land is kept fallow for a period of 1 month in December. Thereafter, crop A is cultivated or the land for a period of 2 months
 Total profit earned = $2 \times 50000 + 1 \times 60000 + 1 \times 40000 = \$2,00,000$
 So in this case we earn maximum profit.
 So to maximize profit we do not cultivate any crop in August but cultivate crop D in September. Hence, [C].
49. Let us calculate profit for each of the options
- [A] Crop A, B and E
 Crop B is sown from June-July
 Crop E is sown from September-December
 Crop A is sown in February-March
 Total profit = $50000 + 60000 + 40000 = \$1,50,000$
 Total cost = $20000 + 5000 + 5000 = \$30000$
- [B] Crops B, D and F
 Crop B is sown in June-July
 Crop D is sown in September-November
 Crop F is sown in Jan-April
 Total profit = $50000 + 60000 + 40000 = \$1,50,000$
 Total cost = $5000 + 15000 + 35000 = \$55000$
- [C] Crops B, D, E and F
 This option is not possible as total cultivation time for the crops will equal $2 + 3 + 4 + 4 = 13$ months.
- [D] Crops C, D & F
 Total cultivation time for crops = $3 + 3 + 4 = 10$ months
 As there are 3 crops, total fallow time = 3 months

XAT

As Total Cultivation Time + Total Fallow Time = 10 + 3 = 13 months, scheduling cultivation of these crops in a year or 12 months is not possible.

[E] Crops A, B, D or E

We have already calculated profits in case of A, B and E in option [A].

In case of crops A, B and D only difference will be for cultivation of crop D which will be done from September-November

Total Profit = 40000 + 50000 + 60000 = \$150000

Total Cost = 20000 + 5000 + 15000 = \$40000

As we can see in case of options [A], [B] and [E] total profit is the same, but in case of option [A], the cost is the least.

So option [A] is the correct answer.

Hence, [A].

SECTION III — QUANTITATIVE ABILITY AND DATA INTERPRETATION

50. In the figure

$$\angle CAD = \angle ADB = 20^\circ \quad (\because AC = CD)$$

$$\text{In } \triangle ACD, \angle ACD = 180 - (20 + 20) = 140^\circ$$

$$\angle ACB = 40^\circ \quad (\because \angle ACB \text{ and } \angle ACD \text{ is a supplementary pair)}$$

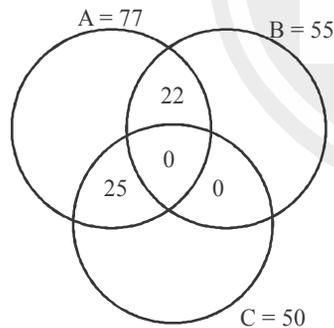
$$\text{Also, } \angle ABC = \angle ACB = 40^\circ \quad (\because AB = AC)$$

$$\text{Now in } \triangle ABC \Rightarrow \angle BAC = 180 - (40 + 40) = 100^\circ$$

$$\angle BAD = \angle BAC + \angle CAD = 100^\circ + 20^\circ = 120^\circ$$

Hence, [D].

51. The information provided in the question can be represented in the Venn Diagram below:



$$\Rightarrow \text{Now } 77 - 22 - 25 = 30 \text{ people opt only for ride A}$$

$$\Rightarrow 55 - 22 = 33 \text{ people opt only for ride B}$$

No. of people who visited with the pass = No. of people who opted only for ride A + No. of people who opted only for ride B + No. of people who opted only for ride A and ride B + No. of people who opted for only ride A and ride C + No. of people who opt neither for ride A nor ride C.

$$\Rightarrow 30 + 33 + 22 + 25 + 40 = 150$$

Hence, [E].

52. Sides of $\triangle XYZ$ and $\triangle ABC$ are trisected in the star shaped figure. So $BR = RM = AM = AN = MN = NZ = ZO \dots$ and so on = 18 cm each

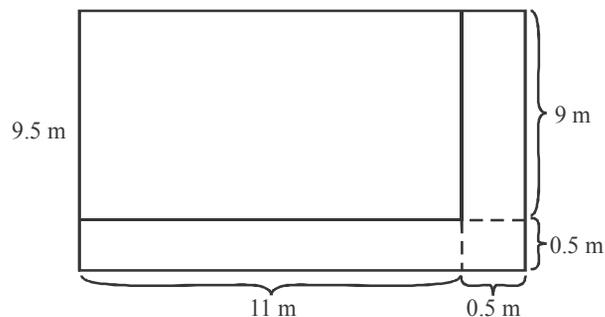
In hexagon MNPQR all sides are equal and measure of each side is 18 cm

$$\text{Area of Regular Hexagon} = 6 \times \frac{\sqrt{3}}{4} \times 18 \times 18 = 486\sqrt{3} \text{ sq.cm}$$

Hence, [B].

Note: It should have been specified in the question that all the small equilateral triangles like $\triangle ANM$, $\triangle OCP$, $\triangle QPX$ etc are congruent.

53.



We can divide the rectangular floor of dimensions 9.5 m × 11.5 m into the following parts:

Part I — 9 m × 11 m = 99 sq.m.

Part II — 9 m × 0.5 m = 4.5 sq.m.

Part III — 11 m × 0.5 m = 5.5 sq.m.

Part IV — 0.5 m × 0.5 m = 0.25 sq.m.

Cost Per sq.m of a tile of side 1 m = Rs.100

$$\text{Cost Per sq.m of a tile of side 0.5 m} = \frac{30}{0.25} = \text{Rs.120}$$

So we should use the tile with side 1 m as far as possible to minimize cost

Cost of Part I = 99 × 100 = Rs.9900

Combined area of Part I & II = 4.5 + 5.5 = 10 sq.m

Since the tiles can be cut, we used 10 tiles with side 1 m and cut each tile (along length of one of the side) into exactly 2 equal parts.

Cost of Part II & III = 10 × 100 = Rs.1000

Part IV can be fit with a tile of side 0.5 m

Cost of this tile = Rs.30

Total cost = 9900 + 1000 + 30 = Rs.10930

Hence, [A].

54.

Using Statement I alone,

Let A, B, C, D, E, and F denote the marks of Anita, Bip..., Cheryl, Danish, Emily and Feroze

$A > \text{---} > \text{---} > C > \text{---} > \text{---}$, $B > D$ and E is not lowest

Some possible arrangements are

$A > B > D > C > E > F$

$A > B > E > C > D > F$

$A > B > F > C > E > D$

So either Danish or Feroze could have scored the lowest marks.

So statement I alone is not sufficient.

Using statement II alone

Since Emily has not scored the lowest, neither will have Feroze as he and Emily have scored the same marks. Now Biplove has not scored the lowest as he scored more than Danish, Anita has scored the highest and Cheryl has scored more than at least 2 others, so neither of them has scored

XAT

the lowest. So only Danish could have scored the lowest.
Statement II alone is sufficient to answer the question.
Hence, [B].

55. Let 'A' be the number of apples sold and 'B' be the number of oranges sold

As per given data,

$$23A + 10B = 653$$

There are only 2 solution sets for the above equation.

$$(A, B) = (11, 40) \text{ or } (A, B) = (21, 17)$$

$$\text{As } A > B \Rightarrow (A, B) = (21, 17)$$

$$\text{Cost Price of 21 apples} = 21 \times 20 = \text{Rs.420}$$

$$\text{Cost Price of 17 oranges} = 17 \times 8 = \text{Rs.136}$$

$$\text{Total C.P.} = 420 + 136 = 556$$

$$\text{Profit percentage} = \frac{653 - 556}{556} \times 100 = \frac{97}{556} \times 100 \cong 17.4\%$$

Hence, [B].

56. Sum of terms in G.P. from 1 to 3^{99}

$$\Rightarrow \frac{1(3^{100} - 1)}{2} \cong \frac{3^{100}}{2}$$

$$3^{100} \div \frac{3^{100}}{2} = 2$$

Hence, [B].

57. $f(1) = 1$
 $f(2) = 2(2) + f(1) = 4 + 1 = 5$
 $f(3) = 2(3) + f(2) = 6 + 5 = 11$
 $f(4) = 2(4) + 11 = 8 + 11 = 19$
and so on

As we can see, the difference between 2 consecutive terms of the sequence is an increasing G.P. with a difference of 2. So the consecutive terms of the function form a quadratic sequence

So n^{th} term will be $an^2 + bn + c$

Now putting $n = 1, 2, 3$ we get

$$a + b + c = 1$$

$$4a + 2b + c = 5$$

$$9a + 3b + c = 11$$

Solving we get $a = 1, b = 1$ and $c = -1$

So n^{th} term of the sequence will be $n^2 + n - 1$

$$f(31) = 31^2 + 31 - 1 = 991.$$

Hence, [D].

58. 2061_B in decimal system is $2B^3 + 6B + 1$
 601_B in decimal system is $6B^2 + 1$
Adding the 2 terms we get $2B^3 + 6B^2 + 6B + 2$
Now, $2B^3 + 6B^2 + 6B + 2 = 432$
 $\Rightarrow 2B^3 + 6B^2 + 6B = 430$
 $\Rightarrow B^3 + 3B^2 + 3B = 215$
Only $B = 5$, satisfies the above equation
So base $B = 5$

$$(1010)_B = (1010)_5 = 125 + 5 = 130$$

Hence, [C].

Note: There is an error in the questions as number in base 5 can only be expressed using digits 0, 1, 2, 3 and 4.

59. If there is only one inlet and one outlet pipe,

$\frac{1}{8} - \frac{1}{2} = \frac{1}{24}$ of the tank will be filled in one hour, which means 24 hours will be required to fill the tank

So if there are 4 inlet and 4 outlet pipes $\left(\frac{24}{4} = 6\right)$ hours will be required to fill the tank completely.

So in this case, $\frac{M}{N} = \frac{4}{4} = 1 : 1$. If we look at option [B] where $M : N = 2 : 1$ and consider 2

inlet pipes and 1 outlet pipe, in one hour $2\left(\frac{1}{8}\right) - \frac{1}{12}$

$\Rightarrow \frac{1}{4} - \frac{1}{12} = \frac{3-1}{12} = \frac{2}{12} = \frac{1}{6}$ of the tank will get full, which means the tank will get full in 6 hours.

Since there are multiple possibilities, no definite relation between M and N can be established. So, it would be best to mark option [E] i.e., None of the above.

Hence, [E].

60. Let the number of students required for the program to break even be P

Now out of total fees of 2000P for the program 400P is funded by XYZ and 1,00,000 by ABC.

For the program to break even

$$400P + 10,00,000 > 2000P$$

$$1600P > 1,00,000$$

$$P > 62.5$$

For the program to break even, 63 students are required.

Hence, [A].

61. Let P denote the time taken from A to B, S denote the time taken from B to D, Q the time taken from A to C, R the time taken from C to D and T the time taken from B to C.

As per given data,

$$P + T + R = 70 \quad \dots (I)$$

$$Q + R = 30 \quad \dots (II)$$

$$P + S = 45 \quad \dots (III)$$

$$Q + T + S = 65 \quad \dots (IV)$$

Adding all 4 equations

$$2P + 2Q + 2R + 2S + 2T = 210$$

$$\Rightarrow P + Q + R + S + T = 105 \quad \dots (V)$$

Since we need to find the value of T

we subtract the sum of (II) and (III) from (V) and get

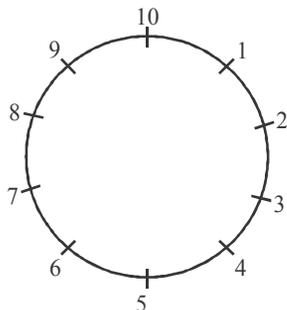
$$(P + Q + R + S + T) - [(Q + R) + (P + S)]$$

$$= 105 - [45 + 30] = 30 \text{ minutes}$$

Hence, [C].

XAT

62. The clock on planet M will appear as below:



Now since the clock shows 3 hours 42 minutes and 20 seconds in the mirror, it is 1 hour 17 minutes and 20 seconds behind 5 O' clock.

An imaginary line joining 10 and 5 will form the line of reflection. So, the present actual time will be 1 hour 17 mins and 20 seconds ahead of 5 O' clock i.e., actual time is 6 hours 17 minutes and 20 seconds. 5 minutes after that time shown by the clock is 6 hours 22 minutes and 20 seconds. Hence, [B].

63. To get this value we need to maximize the product abc and minimize the value of $(a + b + c)$. abc can be maximized taking numbers with highest absolute values.

3 distinct numbers with highest absolute values are: ± 10 , ± 9 and ± 8 .

To maximize abc either all 3 are positive or 2 numbers are negative and 1 is positive.

However, we also have to minimize $a + b + c$

So this is only positive if we consider 2 negative values and one positive value. So we take -10 , -9 and 8 (because $a + b + c$ is to be minimized for which we take highest possible negative values). Taking -10 , -9 and 8

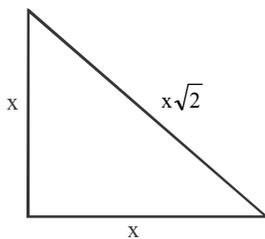
$$[abc - (a + b + c)]$$

$$\Rightarrow -10 \times -9 \times 8 - [-10 - 9 + 8]$$

$$\Rightarrow 720 - [-11] = 731$$

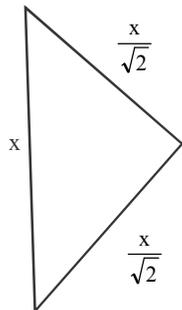
Hence, [C].

64. Let 'x' be the side of the square paper. Folded once the paper will appear as below:

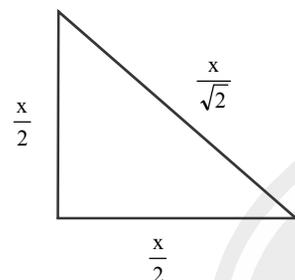


The figure above is an isosceles right angled triangle

Folded 2nd time along the diagonal, the paper will appear as below:



The figure above is also an isosceles right angled triangle
 Folded 3rd time the paper will appear as below:



The above figure is an isosceles right angled triangle.

Given $\frac{x}{2} = 10 \Rightarrow x = 20$

Area of square paper = $20 \times 20 = 400$ sq.cm.

Hence, [A].

Note: A square piece of paper cannot be folded thrice along the diagonal.

65. For an equilateral triangle, radius of the circumcircle is twice the radius of the incircle.
 Let the radius of the circumcircle be '2r' units and radius of the incircle be 'r' units.

So the side of the equilateral triangle will be $2r\sqrt{3}$ units.

$$\begin{aligned} \text{Difference between area of the 2 circles} &= \pi (2r)^2 - \pi (r)^2 \\ &= 3\pi r^2 = 2156 \end{aligned}$$

$$r^2 = \frac{2156}{3\pi}$$

$$\text{Area of equilateral triangle} = \frac{\sqrt{3}}{4} \times (2\sqrt{3}r)^2$$

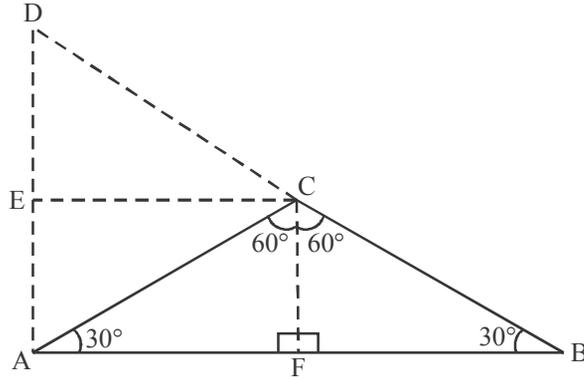
$$= \frac{\sqrt{3}}{4} \times 12r^2 = 3\sqrt{3} r^2$$

$$= 3\sqrt{3} \times \frac{2156}{3\pi} = 2156 \times \frac{7}{22} \times \sqrt{3} = 686\sqrt{3} \text{ sq.units}$$

Hence, [A].

XAT

66. Based on the information given in the question, we can draw the following diagram:



CD represents the path of the object from point C.

We need to find $\angle ECD$.

Now $AB = 600$ m

F is the mid point of AB

$AF = FB = 300$ m

CFB is a 30° - 60° - 90° triangle.

$$\therefore CF = 100\sqrt{3} \text{ m and } CB = 200\sqrt{3} \text{ m}$$

$$\text{Speed of object} = 10 \times \frac{5}{18} = \frac{25}{9} \text{ m/s}$$

So time taken by object to travel $200\sqrt{3}$ m is $200\sqrt{3} \div \frac{25}{9} = 72\sqrt{3}$ seconds.

But as per information given in both statements object travels $200\sqrt{3}$ in 180 seconds.

So information provided in statement I & II are inconsistent with each other.

Hence, [D].

67. $500 = 2^2 \times 5^3$

Since the required number is divisible by 500, it implies that the number is divisible by both 2 and 5. So the number has to be at least divisible by 10.

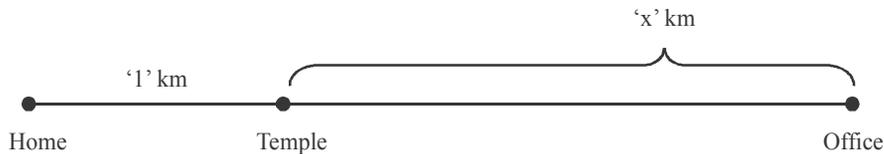
Now since the base is to be at least 10, power of required number will also be 10 as base and power are both equal.

So 10^{10} is the smallest such number given $a + b = 10$. Product ab (given both 'a' and 'b' are positive) will be least when difference between 'a' and 'b' is the greatest.

So for $a = 9$ and $b = 1$, product ab is lowest i.e. 9.

Hence, [B].

68. Let the path from the home to the office be depicted by the diagram below:



Let the distance between temple and office be 'x' km.

Let 'y' km/hr be the walking speed of Pradeep and '8y' km/hr be the driving speed of Pradeep. According to given data

$$\frac{x}{y} = \frac{1}{y} + \frac{x+1}{8y}$$

$$\Rightarrow x = 1 + \frac{x+1}{8}$$

$$\Rightarrow x = 1 + \frac{x}{8} + \frac{1}{8}$$

$$\Rightarrow \frac{7x}{8} = \frac{9}{8} \Rightarrow x = \frac{9}{7}$$

So distance between temple and office is $\frac{9}{7}$ km

Hence, [C].

69. Let a, b, c be $x - 1$, x and $x + 1$ respectively

Solving Numerator

$$(x - 1)^3 + (x)^3 + (x + 1)^3 + 3(x + 1)(x)(x - 1)$$

$$(x - 1)^3 = x^3 - 1 - 3x(x - 1)$$

$$= x^3 - 1 - 3x^2 + 3x$$

$$= x^3 - 3x^2 + 3x - 1$$

$$(x + 1)^3 = x^3 + 1 + 3x(x + 1)$$

$$= x^3 + 1 + 3x^2 + 3x$$

$$= x^3 + 3x^2 + 3x + 1$$

$$3(x + 1)(x)(x - 1) = 3x^3 - 3x$$

Numerator =

$$x^3 - 3x^2 + 3x - 1 + x^3 + 3x^2 + 1 + x^3 + 3x^3 - 3x$$

$$\Rightarrow 6x^3 + 3x$$

$$\text{Denominator} = (x - 1 + x + x + 1)^2 = (3x)^2 = 9x^2$$

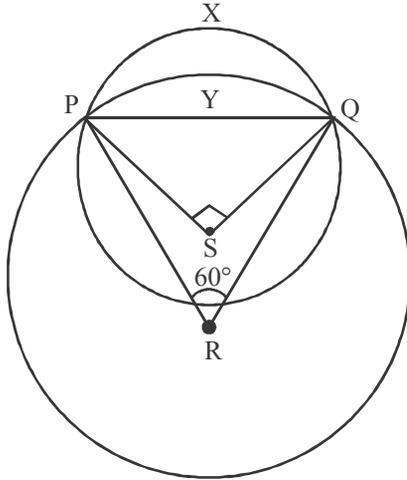
$$\therefore \frac{6x^3 + 3x}{9x^2} = \frac{3x(2x^2 + 1)}{3x(3x)} = \frac{2x^2 + 1}{3x}$$

Putting $x = -9$ to 9 in the above equation, only $x = 1$ and $x = -1$, gives us an integer. So there are 2 possible integer values for the above expression.

Hence, [C].

XAT

70. The 2 complete circles of the circular arcs are represented below:



Suppose S and R are respective centres of 2 circles.

$$\text{Length of curve Y} = \frac{60}{360} \times 2\pi \times r$$

$$10\pi = \frac{2\pi r}{6}$$

$$\frac{r}{3} = 10 \Rightarrow r = 30 \text{ units}$$

$$\therefore PR = RQ = 30 \text{ units}$$

$\therefore \Delta PQR$ is an equilateral triangle

$$PQ = 30 \text{ units}$$

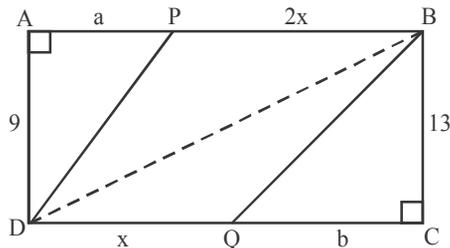
Now PQS is an isosceles right angled triangle

$$\therefore PS = SQ = \frac{30}{\sqrt{2}} = 15\sqrt{2} \text{ units}$$

$$\begin{aligned} \text{Length of Curve X} &= \frac{90}{360} \times 2\pi \times 15\sqrt{2} \\ &= \frac{15}{\sqrt{2}}\pi \text{ units} \end{aligned}$$

Hence, [A].

71. Let us construct the diagram as depicted in the question as below:



Now area of PBCD = Area of ABCD - [Area of ΔAPD + Area of ΔBQC]

Let length of AP = 'a' units and length of QC = 'b' units

Let length of DQ = 'x' units \Rightarrow length of PB = '2x' units

Area of ABCD = Area of $\triangle ABD$ + Area of $\triangle BCD$

$$\Rightarrow \frac{1}{2}(a + 2x)(9) + \frac{1}{2}(b + x)(13)$$

$$\Rightarrow \frac{9}{2}a + 9x + \frac{13}{2}b + \frac{13}{2}x \quad \dots (I)$$

Area of $\triangle APD$ + Area of $\triangle BQC$

$$\Rightarrow \frac{1}{2}9(a) + \frac{1}{2}(13)(b)$$

$$\Rightarrow \frac{9}{2}a + \frac{13}{2}b \quad \dots (II)$$

Subtracting (II) from (I) we get

$$\Rightarrow 9x + \frac{13}{2}x$$

As per given data

$$9x + \frac{13}{2}x \leq 150$$

$$\Rightarrow \frac{31x}{2} \leq 150 \Rightarrow 31x \leq 300$$

Since 'x' can take only integer values, x can take only values from 1 to 9 i.e. a total of 9 values. Hence, [D].

72. The table in the question only provides us with the percentage break up of number of retail outlets, both categorywise and regionwise. However, no information is provided about the percentage break up of population across various regions. So we cannot determine the proportion of retail outlets per 1000 population for any category of retailer. Hence, [D].

73. The question would have been better formed as 'which of the following cannot be definitely inferred from the above data?'

If we evaluate each of the options in the context of the statement provided in the question, option [A] and [B] are both possible. However, just having bigger stores in East India does not imply that the average customer in East India purchases more. So option [C] is not possible.

740 food shops in West India implies 14.8% of shops in West India = 740

$$\Rightarrow \text{Number of shops in West India} = 5000$$

So option [D] is possible

Similarly 240 shops in South India implies 12% of shops in South India = 240

$$\text{No. of shops in South India} = \frac{240}{0.12} = 2000$$

So option [E] is also possible

Hence, [C].

74. As we have no information about the number of retail outlets either regionwise or at an India level for either of the given years, nor do we have information about the percentage change in no. of retail outlets either at a regional level or at an all India level for given years, we cannot say anything about statements [A] to [D] as they all make a comparison over the 4-year period.

Only option [E] can be concluded as it compares 2 types of retail outlets as per the new survey. Hence, [E].

XAT

75. For the years given in the options for the number of people receiving between 20 and 30 lakhs, we can make the following conclusions.

- [A] 2008 : The number of people getting between 20-30 lakhs is the number of people in the highest quarter (i.e.25) plus some people from the 2nd highest quarter.
- [B] 2009 : The number of people is sum of a few people from the 2nd lowest quarter and 2nd highest quarter.
- [C] 2010 : The number of people receiving 20-30 lakhs is sum of a few people from the 2nd lowest quarter, the entire 2nd highest quarter and a few people from the highest quarter.
- [D] 2012 : The number of people receiving 20-30 lakhs is sum of the entire 2nd highest quarter and a few people from the highest quarter.

However, since we do not the exact number of people, where a partial lot of people from a particular quarter is receiving between 20-30 lakhs, we cannot determine the year in which maximum students receive salary in the range 20-30 lakhs

Hence, [E].

76. For the years 2008-2015, mean and median salaries are as below:

Year	Mean Salary (in lakhs)	Median Salary (in lakhs)
2008	17	14
2009	16	24
2010	19	22
2011	10	13
2012	16	20
2013	17	17
2014	17	31
2015	15	23

By observation, we can see that it is only in year 2012 and 2014 where median salary is greater than previous year salary by 60%.

$$\text{Required ratio for 2012} = \frac{20-10}{10} \times 100 = 100\%$$

$$\text{Required ratio for 2014} = \frac{31-17}{17} \times 100 \cong 82\%$$

Hence, [B].

77. For the given question, the difference between the highest salary in the lowest quarter and lowest salary in the highest quarter is greater than 20 lakhs for 2009 and 2014. So for these 2 years we are certain that the difference between average salaries of the highest and lowest quarter will be greater than 20 lakhs.

However, in case of 2015, the difference between highest salary of the lowest quarter and lowest salary of highest quarter is about 18 lakhs. As the mean salary is 15 lakhs, which is the highest point of the lowest quarter, there is a strong possibility that the average of the 1st quarter will be less than 13 lakhs making the difference between average salary of the highest and lowest quarter greater than 20 lakhs. However, we cannot be sure about this.

Hence, the correct answer to this question is cannot be determined, which is not in the answer options.

Note: This question was not considered for computation of scores.

78. The new average salaries for various years are computed below

$$\text{Total salary for 2008} = 100 \times 16 = 1600$$

$$\text{New Average} = \frac{1700}{91} > 14 \text{ (which is median)}$$

$$\text{Similarly, New Average Salary for 2009} \Rightarrow \frac{1600}{95} < 24 \text{ (which is median)}$$

$$\text{New Average Salary for 2010} \Rightarrow \frac{1900}{80} > 22 \text{ (which is median)}$$

$$\text{New Average Salary for 2011} \Rightarrow \frac{1000}{98} < 13 \text{ (which is median)}$$

$$\text{New Average Salary for 2013} \Rightarrow \frac{1500}{98} < 20 \text{ (which is median)}$$

$$\text{New Average Salary for 2013} = \frac{1700}{96} > 17 \text{ (which is median)}$$

$$\text{New Average Salary for 2014} = \frac{1700}{85} < 31 \text{ (which is median)}$$

$$\text{New Average Salary for 2015} = \frac{1500}{98} < 23 \text{ (which is median)}$$

So, the new average salary will be greater than median for exactly 3 years i.e., 2008, 2010, 2013. Hence, [A].

Part B GENERAL KNOWLEDGE

1. Madhya Pradesh has the highest forest cover followed by Arunachal Pradesh. Hence, [A].
2. Meghnad Saha FRS was an astrophysicist best known for his development of the Saha equation which is used to describe the chemical and physical conditions in stars. Hence, [E].
3. From the given statements, only the United States is against the Syrian President. Thus all [1], [2] and [3] are correct. Hence, [B].
4. Angus Deaton is an economist who was awarded the Nobel Memorial Prize in Economic Sciences 2015 for his analysis of consumption, poverty, and welfare. Hence, [A].
5. A conglomerate is a corporation that is made up of a number of different, seemingly unrelated businesses. Thus TCS is not a conglomerate but is a part of the Tata Group which is a conglomerate. Hence, [C].
6. From the given countries, the closest country to Antarctica is Argentina. Hence, [A].
7. New Horizon is the first mission sent by NASA to understand Pluto and the Kuiper Belt. Hence, [C].
8. The Senkaku Islands are the source of dispute between China and Japan and between Japan and Taiwan. Hence, [D].
9. The Inuit Paradox is that the Inuits eat a lot of fat, hardly any fruits and are still very healthy. Hence, [B].
10. The Takata Corporation was in the news recently because it was involved in airbag recalls. It sold faulty airbags which can rupture when deployed and spray bits of metal into driver and front-seat passengers, making worse whatever injuries the components were meant to avert. Hence, [A].

XAT

11. The Red Sea lies to the west of Yemen and Saudi Arabia. Hence, [C].
12. In the Budget Estimates of 2015-16, non-planned expenditure was more than revenue receipts. Hence, [A].
13. The Sinai Peninsula is located in Asia and is a part of Egypt and a Russian plane was downed in November 2015. Hence, [B].
14. According to the Ding Business Report 2015, Singapore was ranked at the top followed by New Zealand and Denmark. Hence, [C].
15. Perumal Murugan is a writer and poet. Hence, [A].
16. Plasmodium Vivax causes malaria. Hence, [B].
17. Pilatus PC-7 is a training aircraft capable of all basic training functions including aerobatics, instrument, tactical and night flying. Hence, [E].
18. India is not one of the top five producers of carrot. They are China, Uzbekistan, Russia, USA and Ukraine. Hence, [D].
19. Of the given countries, India has the lowest external debt. Hence, [D].
20. From the given options, only Itanagar is not related to the automobile industry. Hence, [E].
21. Elon Musk is the CEO and product architect of Tesla Motors. Hence, [D].
22. Raspberry Pi is a credit-card sized computer that you can use to learn programming through fun, practical projects. Hence, [E].
23. Christopher Nolan is associated with all the films except *Matrix*. Hence, [B].
24. Timbuktu is a historical and still-inhabited city in the West African nation of Mali. Hence, [E].
25. RuPay is an Indian domestic card scheme conceived and launched by the National Payments Corporation of India (NPCI). Hence, [C].

Part B ESSAY

“Technology and nature are natural enemies.”

If arguing in favour of the topic, student answer should ideally include the fact that technology is inherently hostile to nature, since it involves making a fundamental change in some form to nature, natural objects or elements. Technology enables man to change nature to suit his own requirements rather than man having to adapt to the natural environment. Examples can include air-conditioners (which can turn a warm environment cold), mechanized farming (which have turned pristine forests to pasture land) etc. These technologies are very useful to man but are at the same time extremely destructive to nature.

If arguing against the topic, pointers can include “clean technologies” such as solar and wind power, clean coal technologies and other newer technologies which are enabling man to change nature to suit his needs without damaging it.