

XAT_2017

SECTION – I

Verbal and Logical Ability

Number of questions: 24

1. A. This is Russia's Wild Weal, though the mountains lie la the south of Moscow and SL Petersburg.
 B. The Caucasus range has throughout history held Russians, especially fierce nationalists like Solzhenitsyn in fear and awe.
 C. Hera, between the Black and Caspian seas, is a land bridge where Europe gradually vanishes amid a six-hundred-mile chain of mountains as high as eighteen thousand feet - mesmerizing in their spangled beauty, especially after the yawning and flat mileage of the steppe lands to the north,
 D. Here, since the seventeenth century, Russian colonizers have tried to subdue congeries of proud peoples: Chechens, Ingush, Ossetes, Daghestanis, Abkhaz, Kartvelians, Kakhetians, Armenians, Azeris, and others.
 E. Here, the Russians encountered Islam in both its moderation and implacability.

Which of the following options is the best logical order of the above statements?

A. A, B, C, D, E
 D. C, A, B, D, E

B. B, C, A, D, E
 E. D, E, C, A, B

C. B, D, C, A, E

Sol: The situation of Europe is explained in sentence 3; hence, it should be the opening line. In continuation to this, "North" takes the idea forward in sentence 1. Sentence 2 talks about the specific range where Russians were held and in contrast to this, 4-5 explain how Russians dealt with the situation. The correct order is 31245.

Ans: D

2. A. The periodic table orders the elements in a way that helps to understand why atoms behave as they do.
 B. The properties of the elements are due to electronic configuration, and their recurring pattern give rise to periodicity.
 C. In other words, what gives the elements their properties and what order lies below the surface of their seemingly random nature?
 D. What makes Fluorine read violently with Caesium while its nearest neighbour neon is reluctant to react with anything?

Which of the following options is the best logical order of the above statements?

A. A, B, C, D
 D. C, D, B, A

B. A, D, C, B
 E. D, C, A, B

C. B, C, A, D

Sol: 1 Introduces the idea and 4-3 take it forward by citing an example. 2 explain the reason for the same. Hence, the correct order is 1432.

Ans: B

3. Fragrant with steam
 were the days and the nights red with
 many braziers
 in the beloved house 1 of my father, my mother.

Which of the following options is the closest expression of the poet's feeling?

- A. The house was located in beautiful settings probably surrounded by flowers in the mountains.
- B. The ancestral home was probably the most important house in the community.
- C. The poet fondly recalls the pleasant climate enjoyed day and night.
- D. The poet misses the braziers and steam she had enjoyed during her childhood.
- E. Everything about the house felt special because of her parents love for her.

Sol: The author feels nostalgic about the days spent in and memories of the beloved house (of her parents) which is clearly expressed in option E.

Ans: E

4. The current trend indicates that food and vegetable inflations continue to be pain points. Food inflation rose to 7.79 percent in June from 7.47 percent, and vegetable inflation rose to 14.74 percent from 10.85 percent. In the weeks ahead, the volatile food inflation will determine the course of overall inflation.

For RBI too, the trend is a concern since under the current agreement with the government, if the inflation exceeds 11 percent it will have to explain to the government why it could not be contained (the lower limit is 2 percent).

Which of the following options is the most appropriate?

- A. The first paragraph states a cause and the second illustrates the effect.
- B. The first paragraph provides information and the second highlights potential application of the information.
- C. The first paragraph is an assertion and the second provides an illustration of that Assertion.
- D. The first paragraph highlights inflation conditions and the second hints at RBI's inefficiency in managing the situation.
- E. The first paragraph highlights pain points and the second contains a remedy for them.

Sol: The first paragraph talks about inflation and the second is demanding explanation from RBI which is best expressed by option D

Ans: D

5. The serious study of popular films by critics is regularly credited with having rendered obsolete a once-dominant view that popular mainstream films are inherently inferior to art films. Yet the change of attitude may be somewhat _____. Although, it is now academically respectable to analyse popular *films*, the fact that many critics feel compelled to rationalize their own _____ action movies or mass-market fiction reveals, perhaps unwittingly, their continued _____ the old hierarchy of popular and art films.

Consider the following words:

- | | | |
|-----------------|--------------------|------------------|
| A. unproductive | B. not appreciated | C. overstated |
| D. penchant for | E. dislike for | F. investment in |
| G. exposure to | | |

Which of the following options is the most appropriate sequence that would meaningfully fit the blanks in the above paragraph?

- A. A, E, G B. C, B, G C. C, D, F D. D, E, F E. F, C, A

Sol: The previous thought about dominant view has been rendered obsolete. The first hint is 'yet' so the new view is 'overstated'. Another hint is 'although' the critics are compelled to rationalize their 'liking for' or 'penchant for' action movies etc. The last blank should have 'investment in'.

Ans: C

6. Invisible atoms coming together
Revealing themselves in visible forms
Seeds are hugged by the earth
Which renders them as gardens in bloom
And yonder stars, are they not pearls
Floating on teeming seas?
Scattered, yet strung together in orderly constellations
Love binding them to one another
And each is perpetually seeking its like

Which of the following options best captures the spirit of the above stanza?

- A. Stars and seas are similar.
- B. All rivers flow into the ocean.
- C. United we stand, divided we fall.
- D. Love dissolves all religious differences.
- E. Something invisible binds disparate objects

Sol: As per the lines 'love binding them together' and the context of the passage the answer option that reflects this essence is option E.

Ans: E

7. Which of the following options is grammatically correct and meaningful?

- A. I want to join an MBA college that is not only the best in the country but also provides the best campus jobs.
- B. I want to join an MBA college that is not only the best in the country but also I can get good job.
- C. I want to join an MBA college that is not only the best in the country hut also best in job.
- D. I want to join an MBA college that is not only good but also I can get good job.
- E. I want to join an MBA college that I found not only best in the country but also I can get good job.

Sol: As per the rule of grammar: with "not only", "but also" is used. Also, the subject should remain either before or after this mandatory pair. Hence, option A satisfies the above rule.

Ans: A

8. On Friday morning, Dieting supplement sales Company Herbalife agreed to pay the US Federal Trade Commission a \$200m fine. The FTC said Herbalife cheated hopeful salespeople out of hundreds of millions of dollars with a high-pressure multi-level marketing scheme.

Herbalife's stock received an immediate 15% increase following the above news. The company also announced that it would hire a second former FTC commissioner in a press release describing the terms of the settlement.

Which of the following options would imply that the 15 percent increase in stock price is fair?

- A. Cheating results in increase in the company's stock price.
- B. When fraudulent companies are exposed, their stock price increases.
- C. When fraudulent companies are caught, their stock price initially goes down,
- D. Acknowledgement of deceit increases the stock price of companies'
- E. Compliance with court order increases the company's stock price.

Sol: As they are hiring a commissioner to have second take on entire matter so option D seems to be appropriate. Also there is no mention of 'court', so option E is not implied.

Ans: D

9. Worldwide, tomato is one of the most important crops. Because this crop can be adapted for cultivation in various environments ranging from tropical to alpine regions, its cultivation area is now expanding worldwide into not so productive regions. On the other hand, traditional cultivation areas, the most favourable for tomato cultivation with warm and dry climate, are contracting. Every year, traditional cultivation areas lose 2 million hectares (ha) of land to environmental factors such as salinity, drought, and soil erosion.

Which of the following is the correct inference based on the above passage?

- A. In recent years, per hectare production of tomato has increased worldwide.
- B. In recent years, per hectare wastage of tomato has increased worldwide.
- C. In recent years, per hectare production of tomato has decreased worldwide.
- D. In recent years, per hectare wastage of tomato has decreased worldwide.
- E. In recent years, per hectare production of tomato has remained the same worldwide.

Sol: As per the last few lines there is loss of cultivation area so per hectare production has decreased worldwide.

Ans: C

10. Carefully read the statements below:

- A. Chatterjee loves books; therefore, he reads them all the time.
- B. Chatterjee loves books. Therefore, he reads them all the time.
- C. Chatterjee loves books and, therefore, reads them all the time.

Which of the above statement(s) is (are) correct in grammar and meaning?

1. A only 2. B only 3. A and B only 4. B and C only 5. A, B & C

Sol: All the three given sentences are correct.

Ans: E

11. Grotesque is related to Macabre in a similar way as

- A. Classics is related to Ruins B. History is related to Palaeontology
- C. Marriage is related to Funeral D. Sorcery is related to Necromancy
- E. Science is related to Thanatology

Sol: The 2 words in the question are synonyms and a similar relation is found in option D.

Ans: D

DIRECTIONS for question 12: Choose the option with all the correct words and their correct accent (underlined syllable) that fits the blanks.

12. The suspension of the captain may _____ the number of spectators, who turn up for this match.
Transportation costs will directly _____ the cost of retail goods.
Grandmother's advancing age could _____ her ability to take care of the house.
She _____ a Texan accent throughout the interview.

- A. affect, effect, effect, effected
B. affect, effect, affect, affected
C. affect, affect, affect, affected
D. effect, affect, effect, effected
E. effect, affect, effect, affected

Sol: "Affect" is a verb and "effect" is a noun. The correct usage here in all of the blanks is for affect. Hence, option C is the correct answer

Ans: C

DIRECTIONS for question 13 to 15: Analyse the passage below and answer the questions.

It's taken me 60 years, but I had an epiphany recently: Everything, without exception, requires additional energy and order to maintain itself. I knew this in the abstract as the famous second law of thermodynamics, which states that everything is falling apart slowly. This realization is not just the lament of a person getting older. Long ago I learnt that even the most inanimate things we know of—stone, iron columns, copper pipes, gravel roads, a piece of paper—won't last very long without attention and fixing and the loan of additional order. Existence, it seems, is chiefly maintenance.

What has surprised me recently is how unstable even the intangible is. Keeping a website or a software program afloat is like keeping a yacht afloat. It is a black hole for attention, I can understand why a mechanical device like a pump would break down after a while—moisture rusts metal, or the air oxidizes membranes, or lubricants evaporate, all of which require repair. But I wasn't thinking that the nonmaterial world of bits would also degrade. What's to break? Apparently everything.

Brand-new computers will ossify, Apps weaken with use. Code corrodes. Fresh software just released will immediately begin to fray. On their own - nothing you did. The more complex the gear,

the more (not less) attention it will require. The natural inclination toward change is inescapable, even for the most abstract entities we know of: bits.

And then there is the assault of the changing digital landscape. When everything around you is upgrading. It puts pressure on your digital system and necessitates maintenance. You may not want to upgrade, but you must because everyone else is. It's an upgrade arms race.

I used to upgrade my gear begrudgingly (why upgrade if it still works?) and at the last possible moment. You know how it goes: Upgrade this and suddenly you need to upgrade that, which triggers upgrades everywhere. I would put it off for years because I had the experiences of one "tiny" upgrade of a minor part disrupting my entire working life. But as our personal technology is

becoming more complex, more co-dependents upon peripherals, more like a living ecosystem, delaying upgrading is even more disruptive. If you neglect ongoing minor upgrades, the change backs up so much that the eventual big upgrade reaches traumatic proportions So I now see upgrading a type of hygiene: You do it regularly to keep your tech healthy. Continual upgrades are so critical for technological systems that they are now automatic for the major personal computer operating systems and some software apps, Behind the scenes, the machines will upgrade themselves, slowly changing their features over time. This happens gradually, so we don't notice they are —becoming."

We take this evolution as normal.

Technological life in the future will be a series of endless upgrades. And the rate of graduations is accelerating. Features shift, defaults disappear, menus morph. I'll open up a software package E don¹) use every day expecting certain choices, and whole "menus will have disappeared.

No matter how long you have been using *a* tool, endless upgrades make you into a newbie—the new user often seen as clueless. In this era of "becoming," everyone becomes a newbie. Worse, we will be newbies forever. Thai should keep us humble.

That bears repeating. All of us—every one of us—will be endless newbies in the future simply trying to keep up. Here's why: First most of the important technologies that will dominate life 30 years from now have not yet been invented, so naturally you'll be a newbie to Them. Second because the new technology requires endless upgrades, you will remain in the newbie state Third, because the cycle of obsolescence is accelerating (the average lifespan of a phone app is a mere 30 days!), you won't have time to master anything before it is displaced, so you will remain in the newbie mode forever, Endless Newbie is the new default for everyone, no matter your age or experience.



13. Which of the following statements would the author agree with the most?

- A. The second law of thermodynamics states that things need more energy as they separate.
- B. When it comes to erosion, intangibles behave differently from tangible.
- C. Degradation is no longer an option but an obligation.
- D. Up-gradation though simple is disruptive.
- E. In the next thirty years, one's experience in up-gradation will be greatly valued.

Sol: The central idea of the passage is that one has to keep improving in order to survive. Hence, option C is the answer.

Ans: C

14. Which of the following quotes would the author agree with the most?

- A. Life is like riding a bicycle. In order to avoid falling, you must keep moving.
- B. The only thing constant in life is change.
- C. You must be the change you wish to see in the world.
- D. If you do not change you will be changed.
- E. What we can't cure we must endure.

Sol: As per the context of the passage and essence shown throughout the 'change' seems to be inevitable. This is reflected in option B.

Ans: B

15. The CEO of a technology company was thinking of the following policies.

- A. Life time employment
- B. Promotion based on seniority
- C. Hire new competent employees and fire old incompetent employees
- D. Regular training and retraining

If a CEO were to consult the author of the passage, which of the above policies should (he author recommend?

- A. A or C
- B. A or D
- C. B or D
- D. C or D
- E. A, C and D

Sol: Only options 3rd and 4th highlight constant improvement, hence, option D is the correct answer.

Ans: D

DIRECTIONS for question 16 to 17: Analyse the passage below and answer the questions Writing is both my vocation and my avocation: that's all I do.

You may wonder why I should write a genealogy. Well, to begin with my story is interesting. And, next, I am a mystery more so than a tree or a sunset or even a flash of lightning. But, sadly, I am taken for granted by those who use me, as if I were a mere incident and without background. This supercilious altitude relegates me to the level of the commonplace. This is a species of the grievous error in which mankind cannot too long persist without peril. For, as a wise man, G. K.Chesterton observed, "We are perishing for want of wonder, not for want of wonders."

I, simple though I appear to be, merit your wonder and awe, a claim I *shall* attempt to prove. In fact, if you can understand me-no, that's too much to ask of anyone - if you can become aware of the miraculousness that I symbolize, you can help save the freedom mankind is so unhappily losing. I have a profound lesson to teach. And I can teach this lesson better than an automobile or on airplane or a mechanical dishwasher because - well, because I am seemingly so simple.

Simple? Yes not a single person on the face of this earth knows how to make me. This sounds fantastic, doesn't it? Especially when you realize that there are about one and one -half billion of my kind produced in the U.S. each year.

Pick me up and look me over. What do you see? Not much meets the eye - there's some wood, lacquer, the printed labeling, graphite lead, a bit of metal, and an eraser.

16. 'I' in the passage, most likely, refers to:
- | | |
|------------------------------|-------------------|
| A. the author of the passage | B. a geometry box |
| C. a study table | D. a pencil |
| E. the evolution of a book | |

Sol: The passage describes a pencil. Words like, graphite, lead etc. highlight it. So, answer is D.

Ans: D



17. A "supercilious attitude" in this passage implies;
- A. Failure to perceive the mystery of the sunset.
 - B. Arrogance of treating all simple things as trivia
 - C. Lack of curiosity in seeking the mystery behind the lightning.
 - D. A tendency to break down intricacies of creation into its simple parts.
 - E. Prosaic attitude immune to the mysteries world

Sol: The word, supercilious denotes an attitude which is demeaning.

Ans: B

DIRECTIONS for question 18 to 20: Analyse the passage below and answer the questions 18-20 that follow:

Some psychologists and sociologists believe that psychopathy can be an asset in business and politics and that, as a result psychopathic traits are overrepresented among successful people. This would be a puzzle if it were so. If our moral feelings evolved through natural selection, then it shouldn't be the case that one would flourish without them. And, in fact, the successful psychopath is probably the exception. Psychopaths have certain deficits. Some of these are subtle. The psychologist Abigail Marsh and her colleagues find that psychopaths are markedly insensitive to the expression of fear. Normal people recognize fear and treat it as a distress cue, but psychopaths have problems seeing it, let alone responding to it appropriately. Other deficits run deeper. The overall lack of moral sentiments—and specifically, the lack of regard for others—might turn out to be the psychopath's downfall. We non-psychopaths are constantly assessing one another, looking for kindness and shame and the like, using this information to decide whom to trust, whom to affiliate with. The psychopath has to pretend to be one of us. But this is difficult. It's hard to force yourself to comply with moral rules just through a rational appreciation of what you are expected to do. [If you feel like strangling the cat, it's a struggle to hold back just because you know that it is frowned upon. Without a normal allotment of shame and guilt, psychopaths succumb to bad impulses, doing terrible things out of malice, greed, and simple boredom. And sooner or later, they get caught. While psychopaths can be successful in the short term, they tend to fail in the long term and often end up in prison or worse. Let's take a closer look at what separates psychopaths from the rest of us. There are many symptoms of psychopathy, including pathological lying and lack of remorse or guilt, but the core deficit is indifference toward the suffering of other people. Psychopaths lack compassion. To understand how compassion works for all of us non-psychopaths, it's important to distinguish it from empathy. Now, some contemporary researchers use the terms interchangeably, but there is a big difference between caring about a person (compassion) and putting yourself in the person's shoes (empathy).

I am too much of an adaptationist to think that a capacity as rich as empathy exists as a freak biological accident. It most likely has a function, and the most plausible candidate here is that it motivates us to care about others. Empathy exists to motivate compassion and altruism. Still, the link between empathy (in the sense of mirroring another's feelings) and compassion (in the sense of feeling and acting kindly toward another) is more nuanced than many people believe. First, although empathy can be automatic and unconscious—a crying person can affect your mood, even if you're not aware that this is happening and would rather it didn't—we often choose whether to empathize with another person. So when empathy is present, it may be the product of a moral choice, not the cause of it. Empathy is also influenced by what one thinks of the other person. Second, empathy is not needed to motivate compassion. As the psychologist Steven Pinker points out, "If a child has been frightened by a barking dog and is howling in terror, my sympathetic response is not to howl in terror with her, but to comfort and protect her." Third, just as you can have compassion without empathy, you can have empathy without compassion. You might feel the person's pain and wish to stop feeling it—but choose to solve the problem by distancing yourself from that person instead of alleviating his or her suffering. Even otherwise good people sometimes turn away when faced with depictions of pain and suffering in faraway lands, or when passing a homeless person on a city street.

18. The core deficit of Psychopaths affects their long term success because

- A. they cannot sustain the behaviour.
- B. they are less likely to succeed as HR managers than as finance managers.
- C. they cannot hide their lack of compassion for long.
- D. empathy is essential for long term success.
- E. natural selection enables moral feelings.

Sol: It has been mentioned that in the longer run, the psychopaths fail to hide their lack of compassion as they are driven by instinct. So, option C is the correct answer.

Ans: C

19. Which of the following options is correct according to the author?

- A. Compassion exists for a reason.
- B. Empathy is a chance event.
- C. Empathy is the cause of moral choice.
- D. Caring for others is psychopathy.
- E. Long term success in business is a freak accident.

Sol: Refer to the first two lines of the 2nd paragraph which explains that compassion exists for a reason.

Ans: A

20. A student approached a faculty pleading to increase his marks because failure in one more subject will result in the student having to leave the program. The faculty said, "I am sorry. But I cannot change your grades as it would be unfair to others" In the given circumstance, which of the following best describes the faculty?

- A. The faculty is a psychopath.
- B. The faculty was compassionate.

- C. The faculty was both empathetic and compassionate but unfair
- D. The faculty displayed empathy but not compassion.
- E. The faculty displayed compassion but not empathy.

Sol : The behavior of the faculty is not empathy; however, he did show his concern.

Ans: E

DIRECTIONS for question 21 to 24: Analyse the passage below and answer the questions 18-20 that follow:

Every age has its pet contradictions, A few decades back, we used to accept Marx and Freud together, and then wonder, like the chameleon on the turkey carpet, why life was so confusing. Today there is similar trouble over the question whether there is, or is not, something called Human Nature. On the one hand, there has been an explosion of animal behavior studies, and comparisons between animals and men have become immensely popular. People use evidence from animal? (to decide whether man is naturally aggressive, or naturally territorial; even whether he has an aggressive or territorial instinct. Moreover, we are still much influenced by Freudian psychology, which depends on the notion of instinct. On the other hand, many still hold what may be called the Blank Paper view, that man is a creature entirely without instincts. So do Existentialist philosophers. If man has no instincts, all comparison with animals must be irrelevant. (Both these simple party lines have been somewhat eroded over time, but both are still extremely influential.)

According to the Blank Paper view, man is entirely the product of his culture. He starts off infinitely plastic, and is formed completely by the society in which he grows up. There is then no end to the possible variations among cultures; what we take to be human instincts are just the deep-dug prejudices of our own society. Forming families, -fearing the dark, and jumping at the sight of a spider are just results of our conditioning. Existentialism at first appears a very different standpoint, because the Existentialist asserts man's freedom and will not let him call himself a product of anything. But Existentialism too denies that man has a nature; if he had, his freedom would not be complete. Thus Sartre insisted that "there is no human nature.... Man first of all exists, encounters

himself, surges up in the world, and defines himself afterwards. If man as the Existentialist sees him is not definable, it is because to begin with he is nothing. He will not be anything until later, and then he will be what he makes himself" For Existentialism there is only the human condition, which is what happens to man and not what he is born like. If we are afraid of the dark, it is because we choose to be cowards: if we care more for our own children than for other people's, it is because we choose to be partial. We must never talk about human nature or human instincts. This implicit moral notion is still very influential, not at all confined to those who use the metaphysics of essence and existence. So I shall sometimes speak of it, not as Existentialist, but as libertarian—meaning that those holding it do not just (like all of us) think liberty important, but think it supremely important and believe that our having a nature would infringe it.

Philosophers have not yet made much use of informed comparison with other species as a help in the understanding of man. One reason they have not is undoubtedly the fear of fatalism. Another is the appalling way terms such as instinct and human nature have been misused in the past. A third is the absurdity of some ethological propaganda.

21. A business school led by an existentialist director, wanted to decide on admission policy for its executive MBA program, which requires candidates to possess minimum five years of

managerial experience.

With respect to the selection process, which of the following statements will be closest to the director's belief:

- A. Tenth standard marks should be given highest weightage.
- B. Twelfth standard marks should be given highest weightage.
- C. Marks scored in the engineering college should be given highest weightage.
- D. Marks scored by the candidate in all previous examinations be given equal weightage.
- E. Recent work experience and contribution to the organization should be given highest weightage.

Sol : A director who is existential in approach will negate conditioning and will focus on the current performance which makes E as the best choice.

Ans: E

22. Which of the following statements would the author agree with the most?

- A. Existentialism can be extended to Libertarianism.
- B. Existentialism and Libertarianism are the same.
- C. Existentialism encompasses Libertarianism.
- D. Animal behaviour should not be compared with human behaviour.
- E. Liberty and existentialism are unrelated,



Sol : Libertarianism is subsumed in existentialism and the latter cannot be extended to the former.

Ans: C

23. Who among the following, as stated in the third paragraph, would the author be the most sympathetic to?

- A. PETA (People for the ethical treatment of animals) activists.
- B. Save the tiger activists
- C. Architect
- D. Physicists
- E. Zoologists

Sol : The author will most sympathetic to PETA activist as per the last paragraph.

The author should be sympathetic to people who stand by the processes which advocate the ethical treatment of animals. Option 2 is too narrow to be considered the correct answer.

Ans: A

24. Which sentence in the passage distances man from 'nature', the most?

- A. The sixth sentence of the first paragraph.
- B. The sentence of the second paragraph.
- C. The sentence third from the last in the passage.
- D. The sentence second from the last in the passage.
- E. The last sentence of the passage.

Sol : The mentioned sentence highlights the fact that "human nature and instinct" have been correlated unnecessarily.

Ans: D



SECTION – II

DECISION MAKING ABILITY

Number of questions: 21

DIRECTIONS for question 25 to 26: Analyse the following caselet and answer the questions.

Vimla is the domestic help for Shreya and her neighbour Padma; both live in a posh gated community- Vimla not only cleans the house, but also cooks for both the families. Shreya treasures Vimla ever since she joined her family four years ago, Vimla joined Padma's household this year.

25. One evening Shreya trying to pay the pizza delivery was surprised to find a few five hundred rupee notes missing from her purse that she was sure were there earlier She wants to ascertain if someone has stolen the money. On reflecting, the following facts crossed her mind:

- A. In the last one year, Shreya had noticed cash missing on three occasions.
- B. Shreya's husband also shared that a few notes were missing train his wallet, though he was not sure if they were stolen.
- C. Her eldest son had been pestering Shreya for more pocket money for the last three weeks; in the last few days, he had stopped doing so.
- D. In the last one year, Vimla had received six mails from her family asking for money.
- E. Her eldest son's expenditure had gone up in the last few days.

Which of the following combinations of the above statements would DECREASE the likelihood that Vimla has stolen the money?

- A. A and C
- B. A and D
- C. A and E
- D. B and D
- E. C and E

Sol : Only the 3rd and the 5th options weaken the notion of Vimla's having stolen the money.

Ans: E

26. Padma discovered some money missing from her purse. She suspects that Vimla has stolen it. She wants to prevent the stealing from happening again and is contemplating the following actions;

- A. She should let it pass, since lo err is human
- B. She should confront Vimla and tell her that she knows the truth and the act is unpardonable regardless of her past service and she is thinking of terminating her services.
- C. She should tell Vimla that she is aware someone has stolen money from the house but is not sure who it is.
- D. She should share with Vim la that neighbours think Vimla has stolen the money though she doesn't, but is interested in finding out the Truth.
- E. She should directly ask Vimla if she stole the money, promising her no punishment if she confesses.

Arrange the following combinations of the above actions in the **DECREASING** order of appropriateness.

- A. A, E, D
- B. B, D, A
- C. B, E, D
- D. C, E, D
- E. E, B,

Sol : The most appropriate action is only confirming or questioning. Hence, our answer option should start with 5th option.

Ans: E

DIRECTIONS for question 27: Analyse the following caselet and answer the questions.

27. Genius Consulting is a boutique consulting firm started by Shirish, Balram, Rahman and Xavier, four friends from a premier business school. They committed themselves to abide by two principles: a) not to indulge in anything unethical and b) share earnings equally.

Genius Consulting could not get a significant project **till the** following year, when they managed a big one after Rahman's father referred their firm to his top management. Convinced of the team's talent following an impressive presentation, the top management awarded them the project even though six other referred teams made presentations.

The day following the presentation, they met to decide the way forward for the organization. Which of the following choices would be the most appropriate for Genius Consulting?

- A. As this project violates both their principles, Genius Consulting should not take up the project.
- B. Due to the violation of the **first** principle, Genius Consulting should not take up this project.
- C. They should take up the project. Further, since Rahman had agreed to equal sharing, he is not entitled to a finder's fee.
- D. They should take up the project and as the referral helped them survive, Rahman should be paid a finder's fee.
- E. They should take up the project. But in order not to violate the principles, Rahman can be paid a finder's fee this year and an equal amount be deducted from his compensation the next year.

Sol: Referring may not be considered as unethical. Further, Rahman should be paid his fee. Therefore, option 4 is the best choice.

Ans: D

DIRECTIONS for question 28-30: Analyse the following caselet and answer the questions.

Mrs Biswas was to retire in one year after serving in the construction department of the Gujarat government for more than thirty years. After retirement, she wanted to spend her retired life along with Mr Biswas, a retired school teacher in a small town in Kerala. They had two children, both studying in Bengaluru, the Biswas' wished to construct a house in Kerala with their life savings.

The couple gathered information about owning a house in Kerala. They had four options:

- A. Buy a fully furnished house from a big developer.
- B. Buy a semi-furnished house from a big developer and furnish it.
- C. Get a local unregistered contractor to construct a house and furnish it.
- D. Mr Biswas wishes inquis from the family could supervise the construction of a house back in Kerala by employing the best material, engineers, masons and labourers.

28. Which option would **ENSURE** the best control of quality of construction for the Biswas'?

- A. The first option would ensure the best quality.
- B. The second option would ensure the best quality.
- C. The third option would ensure the best quality.
- D. The fourth option would ensure the best quality.
- E. Any of the options will equally ensure the best quality.

Sol: It is understandable that the supervision by the family would ensure the best quality. Hence, option D is the best answer.

Ans: D

29. Which of the following additional information, IF TRUE, would improve the chances of the third option being preferred?
- A. Based on the current information, with no additional information, the third is the best option.
 - B. Among local property holders, the contractor in the third option enjoys a good reputation.
 - C. Big developers are less open to changes in design.
 - D. Mr Biswas cannot stay back alone to supervise the construction.
 - E. The Biswas' want to select the furniture on their own.

Sol: If the local contractor enjoys a good reputation, only then Mrs. Biswas will trust a local contractor to construct the house.

Ans: B

30. The Kerala Government recently announced a policy: In case of major quality infringement, the builder will pay a penalty of 50% of the price of the house in addition to the price of The house, to the client within a year of notice.

Rank in ASCENDING order the options that would ensure "control of quality".

- A. A, B, C, D B. B, C, D, A C. C, A, B, D D. D, C, A, B E. D, A, B, C

Sol: We need to with the least appropriate option. In that situation, blindly trusting a local contractor will be the worst possible option. Thus, the answer option has to start with option 3.

Ans: C

DIRECTIONS for question 31-32: Analyse the following caselet and answer the questions.

A pastor had eaten at a restaurant with his troupe of ten and his family. It is a norm to tip the waiter and about 20% of a waiter's salary comes from these tips. However, while paying the bill, the pastor crossed out the automatic 18% tip charged for parties of more than eight and wrote —I give God 10% why do you get 18%? above his signature. The chagrined waitress at the restaurant posted a photo of this on the social media- She was subsequently fired for violating company's policy on customer privacy.

This would have been understandable if the restaurant had not posted just 2 weeks ago & customer receipt that was complimenting them. Social media and social activists came heavily upon the management's ambivalent stand and the firing of the waitress. In response, the company posted a note on their social media page defending their actions. This quickly drew over 10,000 comments, mostly negative, to which the management started responding by posting the same note over and over again. There were also accusations of the company deleting negative comments and blocking users.

The restaurant also experienced a sizable drop in their footfall.

31. Who/what is the main cause for the situation becoming unmanageable?
- A. The pastor for flouting the norm of restaurant.
 - B. The waitress for violating customer privacy.
 - C. The management for not taking action against the pastor.
 - D. The management for giving out disproportionate punish merit to waitress.
 - E. The management for removing negative comments from the social media.

Sol: The passage highlights the unfair punishment as the cause of all the turmoil. Therefore, option D is the best answer.

Ans: D

32. The downward spiral continued for the restaurant as the management persisted in defending their actions and argued with those who criticised them. By the following week, the original post had generated over 18,000 negative comments.

Which of the following is the best way forward for the restaurant at this juncture?

- A. Unconditionally restore the waitress to her former position and salary on the ground that she was never at fault in the first place.
- B. Apologise to and reinstate the waitress and ask her to apologize for her breach of customer privacy and post both the apologies on social media.
- C. Reinstate the waitress provided she apologizes for her breach of customer privacy and post that apology on the restaurant's social media page.
- D. Reinstate the waitress if and only if she apologizes for her breach of customer privacy and posts that apology on her social media page.
- E. Recruit two waitresses at a higher wage but stick to the original decision of firing the waitress.

Sol: Both parties have breached the code. Therefore, apologies by both should settle the dispute. Further, the reinstatement of the waitress would ensure that the public is also pacified.

Ans: B

DIRECTIONS for question 33-34: Analyse the following caselet and answer the questions.

A college campus with a population of around 2,000 of whom 200 were children. 1,200 people between 15 and 45 years, 500 people between 45 and 65 and around 100 people more than 65 years of age. The campus has two big gates opening out to the city. There are 400 cars and 500 motorbikes inside the campus. The residents relied on these vehicles to visit the city located 10 kilometres away.

Now, with land within the campus becoming scarce, the chief administrator (CA) found the growing demand for parking lot difficult to handle. The faculty, staff and students wanted increased parking space. In the past six years, the parking requirement on campus had doubled. The CA found it inappropriate to construct parking lots from the students' fee, even though those with vehicles may not complain about it.

Besides creating parking problems, the CA felt that these vehicles added to the pollution and made residents less responsible towards each other. The risk to the children and the elderly because of over-speeding was menacing. Therefore, the CA wanted to reduce the number of vehicles in the campus. Many faculty members, students and staff members, however, felt that demand for more parking space was natural as vehicles were required to go to the market, railway station, airport, and inter-state bus terminal all located in the city. They also told the CA that the elderly, sick and the toddlers relied only on these vehicles.

After listening to all stakeholders the CA wanted to solve these problems while ensuring the campus remained responsible and green.

33. Which of the following actions would best satisfy all the stakeholders within the campus?
- A. Levy extra fee on students to construct additional parking lots inside the campus. Students should pay for up-keep of the campus.
 - B. Let all vehicles be parked in a college-managed space outside the campus while two battery operated vehicles handle exigencies inside the campus.
 - C. Bring all stakeholders to the discussion table
 - D. To reduce carbon footprints, only pooled vehicles should be allowed to operate inside the campus.
 - E. Charge significant fee from any vehicle entering or leaving the campus.

Sol: This will take care of problems stated in the passage as pollution will be less, parking space can be managed and any emergency can also be taken care of.

Ans: B

34. Which of the following would be the best option to increase revenue» decrease carbon footprint and still satisfy all the stakeholders in the campus?
- A. Make substantial collection from vehicles entering or leaving campus and construct a parking lot outside the campus.
 - B. Levy extra fee on the students and build extra parking lots inside the campus
 - C. Bring all stakeholders to table and let them build consensus
 - D. To reduce the carbon footprint, only pooled vehicles be permitted on campus
 - E. Let all vehicles be parked in a managed space outside the campus while battery operated vehicles parked at the two gates can be used inside the campus

Sol: Considerable collection from vehicles will certainly increase the revenue and decrease pollution inside the campus. Hence, A should be the best choice.

Ans: A

DIRECTIONS for question 35-36: Analyse the following caselet and answer the questions.

Girirajan an unemployed youngster from Kumbakonam, Tamilnadu, visited Singapore where his school friend worked as software engineer. In Singapore, Girirajan realized that there were a lot of Tamils in "Little India" area. He soon assessed that there were very few restaurants serving authentic Tamil food and decided to set-up a restaurant —Giri's in "Little India" serving authentic Tamil food in traditional banana leaf. Customers loved the food. Very soon word spread about the good quality food served in the traditional way. Girirajan expanded operation recruiting 10 employees, all Tamils.

Six months later, Girirajan realized that a lot of Kannadiga and Telugu customers started visiting the restaurant along with their Tamil friends. One day, a Kannadiga customer looking for Devangere Benne Dosa suggested that it may not be a bad idea for Girirajan to serve Karnataka Andhra cuisines along with Tamil.

With time, the popularity of the restaurant kept soaring. As a result, a lot of Malays, Indonesians and Chinese started visiting the restaurant. His software engineer friend advised to cater to customers of all nationalities. Despite his desire to go grand, Girirajan realized he did not have enough money to see extra space anywhere in Singapore and banks were also reluctant to lend.

One day, while assessing the business, he realized that the restaurant had 90% occupancy rate during peak hour and 40% during the non-peak hours. Both figures were increasing with time.

35. Which of the following options would be most suitable for the growth of the business?

- A. Include Karnataka and Andhra cuisines in the menu
- B. Include Indonesian and Chinese Cuisines in the menu
- C. Keep the focus on Tamil food only with an increased focus on quality Improvement.
- D. Expand to include either Karnataka and Andhra cuisines or Indonesian and Chinese
- E. Include Karnataka and Andhra cuisines as well as Indonesian and Chinese.

Sol: A lot of people from Karnataka and Andhra visit the place. Thus, option 1 should support the business as he does not have the resources to expand so best is option A as this can be managed within existing resources.

Ans: A

36. Girirajan started analysing his quarterly customer data to assess growth opportunities. He discovered that 20 % of his customers are Kannadigas and many of them were requesting for a few Karnataka dishes. He was not sure if it was a good idea to serve Karnataka food. He wanted to experiment before taking the final call, Which of the following options will be worth experimenting in the next fortnight?

- A. Introduce a Karnataka food day every week to please the Kannadiga customers.
- B. Recruit a few Kannadiga waiters to interact with Kannadiga customers.
- C. Rename a few Tamil dishes as Karnataka dishes.
- D. Serve Karnataka dishes as and when requested by customers without the menu displaying these dishes.
- E. Add a few Karnataka dishes to the cuisine and display these in a separate menu.

Sol: Because of the strength of Karnataka customers, this experiment is worthwhile being made.

37. Girirajan experimented with Karnataka food for a fortnight He collected sales data for Karnataka food along with the trend of overall sales for the last seven days. Which of the following datasets. IF TRUE, will give Girirajan greater confidence to continue serving Karnataka food? (Figures below represent Karnataka food sales as percentage of total sales)

- A. 14, 15, 16, 17, 18, 19, 20, with total sales trend increasing by 0.4%,
- B. 20, 20, 20, 20, 20, 20, 20, with total sales trend increasing by 0.4%.
- C. 50, 47, 44, 40, 47, 45, 40, with total sales trend remaining same.
- D. 45, 44, 43, 42, 41, 40, 39, with total sales trend remaining same
- E. 20, 50, 10, 45, 43, 36, with total sales trend coming down.

Sol: An increase in sales percentage and overall sales would increase Girirajan's confidence in the business.

Ans: A

DIRECTIONS for question 38-40: Analyse the following caselet and answer the questions.

A University coach was asked to select teams in three sports: Shooting, Cricket (batsmen only) and "Snakes & Ladder". The honest and keen observer head boy of the school informed the coach that he had observed 100 students playing the three games - shooting, cricket and "Snakes & Ladder". In shooting, all students were given 100 chances to hit a target. In cricket, a batsman faced a maximum of 100 balls, provided he DID NOT GET OUT. In "Snakes & Ladder", every student could play 100 matches, one each with the other students and one against a computer. In shooting, a player got one point for missing it. In "Snakes & Ladder", a person got one point for winning the game and zero for losing. To the coach's utter surprise, the distribution of points across all three games was the same. It was as follows:

Points scored	Number of students
0-9	1
10-19	8
20-29	5
30-39	15
40-49	20
50-59	20
60-69	13
70-79	7
80-89	9
90-99	2

The coach has to select a team of eleven in each sport.

38. Which of the following options is the best way to select the "Snakes & Ladder" team?

- A. The coach must select all students between 80 and 99.
- B. The coach must select both the students between 90 and 99.
- C. The coach must select at least 6 students between 40 and 59.
- D. The coach must not select students between 0 and 9.
- E. The coach can ignore the data in the table and randomly pick any 11 players.

Sol : Since winning or losing in Snakes & Ladder game is matter of luck, thus the coach can ignore the data in the table and randomly pick any 11 players.

Ans: E

39. Which of the following options is the best way of selecting the Shooting team?

- A. The coach should select all students in 80-99 ranges.
- B. The coach should select both the students in 90-99 range; others can be from any of the other ranges
- C. The coach should select at least 6 students between 40 and 49.
- D. The coach should not select students between 40 and 89.
- E. The coach can pick randomly any 11 players from any of the ranges.

Sol: Since results of shooting are completely dependent on skills of a shooter, thus the results must be fair and the coach should select all students in 80- 99 ranges.

Ans: A

40. Which of the following options is the correct statement for picking up the cricket team?
- A. The coach should never select the player in the range of 0-9 points.
 - B. The coach should never select players from the range of 50-59.
 - C. The coach should never select players from the range of 70-79.
 - D. The coach should definitely select players only front the range of 80-99.
 - E. None of the above.

Sol : In cricket, a batsman may or may not face all 100 balls (being out before completion of 100 balls). Thus a batsman, who is otherwise playing good, may be out before completion of 100 balls and his exact performance may not be evident from the table. Thus, nothing definite can be said regarding the selection of cricket players.

Ans: E

DIRECTIONS for question 41: Analyse the following caselet and answer the questions.

41. As a newly started organization in the IT sector, Saksha IT is a fast growing 400 employee organization. Its head, Saksha Kumar believes in building an organization driven by humility. Which of the following policies would best help him achieve that?
- A. Employees shall, in their annual evaluation form, be asked to acknowledge three of their shortcomings, overcoming which will make them better.
 - B. Employees shall be asked to share with their peers three shortcomings they had noticed about their peers.
 - C. The immediate superiors would suggest three shortcomings their subordinates have to work on in a given period.
 - D. Everyone beginning with Saksha, shall be asked to share three of their weaknesses, in a public forum.
 - E. Employees shall be asked to overcome three shortcomings in the following year, Improvement, if noticed would attract rewards.

Sol : The first option denotes a step taken by the organization to ensure humility among employees. Hence, A is the correct option.

Ans : A

42. Principal Maheswari BINK School of Management is facing a problem that calls for quick action. She received an anonymous mail one day, possibly from one of the students, complaining about outdated syllabi, mediocre teachers and poor choice of courses on offer.
- Which of the following is the best course of action available to the Principal?
- A. She should invite students to discuss any problem openly, one on one or in small groups, promise to act on them but firmly condemn the culture of anonymous mails.
 - B. She should update the students about the efforts the institute is taking in sprucing up the syllabi, hiring talented faculty etc, but make no reference to the letter.
 - C. She should convenes meeting of the faculty at the earliest and gel them to work on updating the syllabi and also arrange a faculty development program but keep mum about the letter.
 - D. She should convenes meeting of the faculty and talk about the letter as a symptom of a deeper malaise, ask them to update the syllabi and also organize faculty development program.

E. She should ignore the letter and no! think about it all.

Sol : All the problems such as up gradation of syllabus, faculty development and also keeping the option of anonymous feedback open

Ans : C

DIRECTIONS for question 43 to 45: Analyse the following caselet and answer the questions.

Shyam prepares and sells piping hot puri and sabji (gravy) from 7:00 am to 9:00 am (both inclusive) through a stall at XLRI campus. Presently, he has just a single oven, which can do only one job at a time. It takes 30 minutes to cook one handi (a large bowl) of sabji, sufficient for 12 customers. It takes him 10 minutes to prepare 2 plates of puri at a time. While the cost of a plate of puri-sabji is Rs. 10 the price is Rs. 25. Puri stays hot for only 5 minutes after preparation, while sabji stays hot for 30 minutes only. It takes 10 minutes to reheat the sabji which stays hot for another 30 minutes. If he brings a handi of hot sabji from home, the transport would cost him Rs. 50. It can also stay hot for 30 minutes excluding the transportation time. Currently, every 20 minutes five plates are ordered. All unsold quantities are distributed at cost after 9:30 am.

43. Find the maximum number of plates of puri-sabji Shyam can sell in the first hour of business?

A. 6 B. 8 C. 10 D. 12 E. 15

Sol : We assume that 1st handi of subzi is sourced from home. Now this can cater to 12 customers but subject to how many puris can be made within the first hour. Now, after 30 min we need to reheat the subzi for 10 min. So in that time no puris can be made, hence decreasing the number of puris by 2 giving the maximum plates to be $12 - 2 = 10$

Ans : C

44. Shyam's puri-sabji became famous. Now he gets 5 orders per 10 minutes and has invested in an additional oven. As he is working alone on both the ovens simultaneously, now in any one oven it takes him 45 minutes to cook one handi of sabji. 15 minutes for 2 plates of puri and 15 minutes to reheat the sabji. He can bring only one handi from home. What will be his maximum daily profit?

A. Rs. 250 B. Rs. 280 C. Rs. 300 D. Rs. 330
 E. Rs. 360

Sol :

Oven	Puri/Sabzi	Time Slot	No. of plates
1	Puri	7:00 to 7: 15	2
2	Puri	7: 00 to 7: 15	2
1	Puri	7:15 to 7: 30	2
2	Puri	7:15 to 7: 30	2
1	Subzi (Reheat)	7:30 to 7: 45	-
2	Puri	7:30 to 7: 45	2
1	Subzi (Cook)	7:45 to 8: 30	-
2	Puri	7:45 to 8: 00	2
First handi finished			12
2	Puri	8:15 to 8:30	2
1	Puri	8:30 to 8:45	2
2	Puri	8:30 to 8:45	2
1	Puri	8:45 to 9:00	2
2	Puri	8:45 to 9:00	2
			10

Hence , grand total of plates =12+10=22
Now, profit = $15 \times 22 = 330 - 50$ (Transport cost) = 280

Ans : B

45. Shyam's stall was becoming popular by the day. Now he gets 5 customers every 10 minutes. After buying a second oven, he employed a helping hand, Aman at Rs. 100 for two hours. Aman can cook one handi of sabji in 20 minutes or can prepare 3 plates of puri in 10 minutes. Reheat time for sabji is 10 minutes. None of them can work on both the ovens simultaneously.

Which of the following options will help Shyam maximize his daily profit, if he does **NOT** bring sabji from home?

- A. Shyam should dismiss Aman because his wages are more than the benefits he brings.
- B. Shyam will prepare only puri and Aman will prepare only sabji.
- C. Shyam will prepare only sabji and Aman will prepare only puri.
- D. Shyam and Aman will prepare both puri and sabji.
- E. Options B, C and D will yield the same profit.

Sol : Since Aman is more efficient, thus he should make sabji while Shyam should make puri. Thus, for first 20 minutes, Aman will make sabji and Shyam will make puri in last 10 min, (of first 20 min. slot) so that reheating of puri is not required. Now, after this, both should simultaneously make puri in 2 ovens at their own rate for next 10 min. (because sabji is still available, no need to make more sabji). Thus, it can be safely concluded that to maximize profits, Aman should be doing both the jobs and hence the best choice will be option (D).

Ans: D



Ans : B

49. Four two-way pipes A, B, C and D can either fill an empty tank or drain the full tank in 4, 10, 12 and 20 minutes respectively. All four pipes were opened simultaneously when the tank is empty. Under which of the following conditions the tank would be half filled after 30 minutes?

- A. Pipe A filled and pipes B, C and D drained
- B. Pipe A drained and pipes B, C and D filled
- C. Pipes A and D drained and pipes B and C filled
- D. Pipes A and D filled and pipes B and C drained
- E. None of the above

Sol : A → 4 min, B → 10 min, C → 12 min, D → 20 min

Going by options, we see that 1st option satisfies the given condition as

$$\frac{1}{4} - \frac{1}{10} - \frac{1}{12} - \frac{1}{20} = \frac{15 - 6 - 5 - 3}{60} = \frac{1}{60}$$

. So tank is filled in 60 min.
Hence it would be half-filled in 30 min

Ans : A

50. A shop, which sold same marked price shirts, announced an offer - if one buys three shirts then the fourth shirt is sold at a discounted price of Rs. 100 only. Patel took the offer. He left the shop with 20 shirts after paying Rs. 20,000. What is the marked price of a shirt?

- A. Rs. 1260
- B. Rs. 1300
- C. Rs. 1350
- D. Rs. 1400
- E. Rs. 1500

Sol : Let MP of shirt = x

So as per question, $(3x + 100) \times 5 = 20000$

$$3x + 100 = 4000 \quad 3x = 3900 \quad x = 1300$$

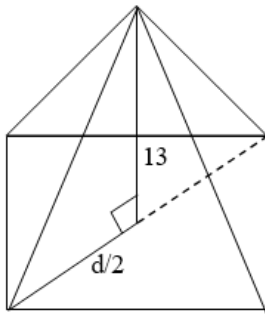
Ans : B

51. The volume of a pyramid with a square base is 200 cm^3 . The height of the pyramid is 13 cm. What will be the length of the slant edges (i.e. the distance between the apex and any other vertex), rounded to the nearest

Integer ?

- A. 12 cm
- B. 13 cm
- C. 14 cm
- D. 15 cm
- E. 16 cm

Sol :



$$\text{Volume of Pyramid} = \frac{1}{3} \times \text{area of base} \times \text{height}$$

$$\Rightarrow \frac{1}{3} \times a^2 \times h = 200 \Rightarrow a^2 = \frac{200 \times 3}{13} = \frac{600}{13}$$

$$\text{Also, Area of square (base)} = a^2 = \frac{1}{2} d^2$$

$$\Rightarrow d^2 = 2 \times a^2 = \frac{1200}{13}$$

$$\Rightarrow d^2 = \sqrt{\frac{1200}{13}} \Rightarrow \frac{d}{2} = \sqrt{\frac{1}{4} \times \frac{1200}{13}} = \sqrt{\frac{300}{13}}$$

Thus, required length of slant edge

$$= \sqrt{13^2 + \frac{a^2}{4}} = \sqrt{169 + \frac{300}{13}} = \sqrt{\frac{2497}{13}} \cong 14 \text{ cm}$$

Ans : C

52. A dice is rolled twice. What is the probability that the number in the second roll will be higher than that in the first ?

A. 5/36
D. 21/36

B. 8/36
E. None of the above

C. 15/36

Sol : No. in the 2nd roll higher than 1st. To satisfy this condition, we take any 2 nos. out of total 6 numbers on the dice. Hence favourable cases = ${}^6C_2 = 15$.

Total 36 cases possible in this case. So reqd. probability = $\frac{15}{36}$.

Ans : C

53. If $f(x) = ax + b$, a and b are positive real numbers and if $f(f(x)) = 9x + 8$, then the value of a + b is:

A. 3
D. 6

B. 4
E. None of the above

C. 5

Sol : If $f(x) = ax + b$

Then, $f(f(x)) = a(ax + b) + b$ Thus, $a^2x + ab + b = 9x + 8$

Comparing coefficients of x and constant term, we get $a^2 = 9 \Rightarrow a = \pm 3$ and $ab + b = 8 \Rightarrow b = 2$ or -4 .

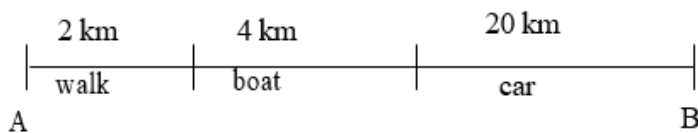
Thus, a+b can be $3+2 = 5$ or $-3+(-4) = -7$.

Hence, option (c) is the correct answer

Ans : C

54. Arup and Swarup leave point A at 8 AM to point B. To reach B, they have to walk the first 2 km, then travel 4 km by boat and complete the final 20 km by car. Arup and Swarup walk at a constant speed of 4 km and 5 km/hr respectively. Each rows his boat for 30 minutes. Arup drives his car at a constant speed of 50 km/hr while Swarup drives at 40 km/hr. If no time is wasted in transit when will they meet again?
- A. At 9.15 AM B. At 9.18 AM C. At 9.21 AM D. At 9.24 AM E. At 9.30 AM

Sol :



Walking speed of A = 4 kmph
 Walking speed of S = 5 kmph
 Time taken by A to walk 2 km = 30 min
 Time taken by A to ride by car = 24 min
 Let's consider person S
 Time taken by S to walk 2 km = 24 min
 Time taken by S to ride by car = 30 min
 So Total journey time for both = 30 + 24 + 30 = 84 min
 Hence they would be together at B at 9 : 24 AM

Ans : D

55. Hari's family consisted of his younger brother (Chari), younger sister (Gouri), and their father mother. When Chari was born, the sum of the ages of Hari, his father and mother was 70 years. The sum of the ages of four family members, at the time of Gouri's birth, was twice the sum of ages of Hari's father and mother at the time of Hari's birth. If Chari is 4 years older than Gouri, then find the different in age between Hari and Chari.
- A. 5 years B. 6 years C. 7 years D. 8 years E. 9 years

Sol: When Hari was born, let's assume age of father was F and mother was M. When Chari was born (after x years of Hari), the age of Hari = x years
 $\Rightarrow x + (F + x) + (M + x) = 70$ -----(1)
 When Gouri was born (further after 4 years), then Ages of 4 family members = 2 × (Ages of father & mother at Hari's birth)
 $(x + 4) + 4 + (F + x + 4) + (M + x + 4) = 2(F + M)$
 $\Rightarrow 3x + 16 = F + M$ -----(2)
 Putting value of (F + M) from eqn. (2) to eqn (1), we get
 $\Rightarrow 3x + 3x + 16 = 70$
 $\Rightarrow 6x = 54 \Rightarrow x = 9$ years
 Thus difference in age between Hari and Chari is 9 years.

Ans : E

can have maximum $60 - (30 + 15) = 15$ people.

Ans : D

58. If $5^0 \leq x^0 \leq 15^0$, then the value of $\sin 30^\circ + \cos x^0 - \sin x^0$ will be:
- A. Between -1 and -0.5 inclusive
 B. Between -0.5 and 0 inclusive
 C. Between 0 and 0.5 exclusive
 D. Between 0.5 and 1 inclusive
 E. None of the above

Sol: Let take x as 50
 So $\cos 50$ would be very close to 1 and $\sin 50$ would be very close to 0 . So difference is a higher value (<1) but close to it.

When $\sin 30^\circ = \frac{1}{2}$ is added to this, the value crosses 1 . Hence none of the options match

Ans: E

59. If $N = (11^{p+7})(7^{q-2})(5^{r+1})(3^s)$ is a perfect cube, where p, q, r and s are positive integers, then the smallest value of $p + q + r + s$ is:
- A. 5
 B. 6
 C. 7
 D. 8
 E. 9

Sol: $N = (11^{p+7})(7^{q-2})(5^{r+1})(3^s)$
 If N is a perfect cube, then min. positive values of p, q, r, s would be $p=2, q=2, r=2$ and $s=3$.
 So smallest value of $p + q + r + s = 2 + 2 + 2 + 3 = 9$

Ans : E

60. An institute has 5 departments and each department has 50 students. If students are picked up randomly from all 5 departments to form a committee, what should be the minimum number of students in the committee so that at least one department should have representation of minimum 5 student?
- A. 11
 B. 15
 C. 21
 D. 41
 E. None of the above

Sol: For representation of minimum 5 students from at least one department, assume that first 5 students are selected, one from each department. Similarly, next 3 sets of 5 students will be selected (3 from each department). Now, 4 students are selected from each department. As soon as one more student is selected from any department, the representation of that department will be of 5 students. Hence, minimum 21 students should be in the committee.

Ans : C

61. AB, CD and EF are three parallel lines, in that order. Let d_1 and d_2 be the distances from CD to AB and EF respectively. d_1 and d_2 are integers, where $d_1:d_2 = 2:1$, P is a point on AB, Q and S are points on CD and R is a point on EF. If the area of the quadrilateral PQRS is 30 square units, what is the value of QR when value of SR is the least?
- A. slightly less than 10 units
 B. 10 units
 C. slightly greater than 10 units
 D. slightly less than 20 units
 E. slightly greater than 20 units

Sol.

DIRECTIONS for question 63 to 64: Study the data given in the caselet below and answer the questions.

In an innings of a T20 cricket match (a team can bowl for 20 overs) 6 bowlers bowled from the fielding side, with a bowler allowed maximum of 4 overs. Only the three specialist bowlers bowled their full quota of 4 overs each, and the remaining 8 overs were shared among three non-specialist bowlers. The economy rates of four bowlers were 6, 6, 7 and 9 respectively. (Economy rate is the total number of runs conceded by a bowler divided by the number of overs bowled by that bowler). This however, does not include the best bowler (lowest economy rate) and the worst bowler (highest economy rate). The number of overs bowled and the economy rate of any bowler are in integers.

63. Read the two statements below;
S1: The worst bowler did not bowl the minimum number of overs. S2; The best bowler is a specialist bowler.

Which of the above statements or their combinations can help arrive at the minimum number of overs bowled by a non-specialist bowler ?

- A. S1 only.
- B. S2 only
- C. Either S1 or S2.
- D. S1 and S2 in combination.
- E. The minimum number of overs can be determined without using S1 or S2.

Sol . Overs bowled by specialist bowlers =12. Overs bowled by non specialist bowlers = 8.
Since there are 8 overs, so maximum a bowler can bowl is 3 overs. So 3, 3, 2 is the only breakup of 8 overs.
Hence non specialist bowler can bowl a minimum of 2 overs. Hence statement S1 or S2 are not required.

Ans : E

64. Read the two statements below:
S1. The economy rates of the specialist bowlers are lower than that of the non-specialist bowlers.
S2. The cumulative runs conceded by the three non-specialist bowlers were 1 more than those conceded by the three specialist bowlers.

Which of the above statements or their combinations can help arrive at the economy rate of the worst bowler?

- A. S1 only.
- B. S2 only
- C. Either S1 or S2.
- D. S1 and S2 in combination.
- E. The economy rate can be calculated without using S1 or S2.

Sol: Economy rates are 6,6,7,9 which exclude worst bowler and best bowler. As per S₁, Economy rates of specialist bowlers are lower than that of non- specialist bowlers so let's take economy rates of specialist bowlers as 5, 6 and 6. Hence their cumulative runs would be $(5 \times 4) + (6 \times 4) + (6 \times 4) = 68$ As per S₂, cumulative runs for non specialist bowlers =69. And their economy rates are 7, 9. Let's take economy rate of worst bowler be x So $(7 \times 3) + (9 \times 2) + (x \times 3) = 69 \Rightarrow x = 10$

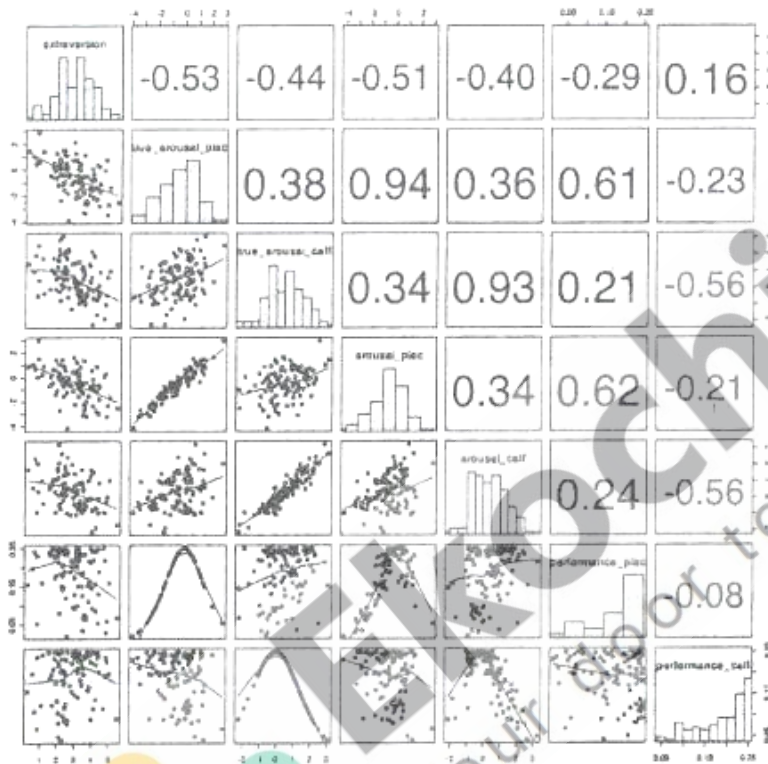
If we take economy rate of best bowler as 4 or less, then economy rate of worst bowler is obtained as less than 9. This violates the given condition. Hence the case solved above is absolutely correct.

So we can find the economy rate of worst bowler using both the statements. Hence answer is option D.

Ans : D

DIRECTIONS for question 65 to 68: Analyse the graph below and answer the question.

The grid below captures relationships among seven personality dimensions: —extraversionl, —true_arousal_placl, —true_arousal_caffl, —arousal_placl, —arousal_caffl, —performance_placl, and —performance_caffl. The diagonal represents histograms of the seven dimensions. Left of the diagonal represents scatterplots between the dimensions while the right of the diagonal represents quantitative relationships between the dimensions. The lines in the scatterplots are closest approximation of the points. The value of the relationships to the right of the diagonal can vary from -1 to $+1$, with -1 being the extreme linear negative relation and $+1$ extreme linear positive relation. (Axes of the graph are conventionally drawn)



65. Which of the following is true?

- A. "Extraversion" has two modes.
- B. Median for "arousal_plac" is definitely the same as its average.
- C. Median for —arousal_caffl is definitely higher than its average.
- D. Median for —performance_plac" is definitely lower than its average.
- E. Median for —performance_caffl is definitely lower than its average.

Sol : Option A is incorrect as "extraversion" has 3 modes instead of 2 and among the remaining options graph values of "performance plac" are very much clear and further its median is 1.75 and average is 2.55. Hence median of this parameter is definitely lower than its average .Hence option D is the answer

Ans : D

66. Which of the scatterplots shows the weakest relationship?

- A. Between "extraversion" and "performance_caffl"
- B. Between —true_arousal_placl and "arousal_plac"
- C. Between "true_arousal_placl and "performance_caffl"
- D. Between —true_arousal_caffl and —performance_caffl"
- E. Between —arousal_caffl and —performance_caffl"
- F.

Sol : The scatter plot is most scattered between "extraversion" and "performance_caffl" among the given options. Hence it shows the weakest relationship. Hence option A is the answer

Ans: A

67. In which of the following scatterplots, the value of one dimension can be used to predict the value of another, as accurately as possible?

- A. "extraversion" and "true_ arousal_ caffl
- B. —true_ arousal_ plac and —arousal_ plac
- C. —true_ arousal_ plac and —performance_ plac
- D. —true_ arousal_ plac and —performance_ caffl
- E. All the above are irrelevant relations

Sol : Among the given option the scatter plot between “true arousal plac” and “performance plac” is least scattered and as we can clearly find the relation between these two parameters at any point. Hence the value of one dimension can be used to predict the value of another, as accurately as possible. Hence option C

Ans : C

68. Which of the following options is correct?

- A. 0.93 on the right side of the diagonal corresponds to the third scatterplot in the fourth row
- B. 0.94 on the right side of the diagonal corresponds to the second scatterplot in the fourth row.
- C. 0.38 is the relationship between "extraversion" and —true_ arousal_ plac
- D. —arousal_ caffl and —performance_ caffl are positively related.
- E. The line that captures relationship between —arousal_ caffl and —arousal_ plac can be denoted by equation: $y = a - bx$, where $b > 0$.

Sol : 94 on the right side is between “true arousal plac” and “arousal plac” which on the left side correspond to the second scatter plot in the fourth row. Hence option B is answer.

Ans : B

DIRECTIONS for question 69 to 72: Study the paragraph below and answer the questions 69-72 that follow:

Abdul has 8 factories, with different capacities, producing boutique kurtas. In the production process, he incurs raw material cost, selling cost (for packaging and transportation) and labour cost. These costs per kurta vary across factories. In all these factories, a worker takes 2 hours to produce a kurta. Profit per kurta is calculated by deducting raw material cost, selling cost and labour cost from the selling price (Profit = selling price - raw materials cost - selling cost - labour cost). Any other cost can be ignored.

Exhibit: Business Details of Abdul’s 8 Factories

	Production Capacity	Selling Price/Kurta	Profit/Kurta	Selling Cost/Kurta	Labour Cost/Hour
#	(No. of Kurtas)	Rs.	Rs.	Rs.	Rs.
Factory 1	2500	4800	775	60	450
Factory 2	1500	5300	800	45	400
Factory 3	800	5800	900	60	550
Factory 4	1000	5500	800	68	450
Factory 5	1500	5400	600	75	600
Factory 6	1100	6000	875	65	400
Factory 7	2500	4900	500	85	350
Factory 8	2000	5300	600	70	420

69. Which of the following options is in decreasing order of raw materials cost?

- A. Factory 3, Factory 4, Factory 7, Factory 5
- B. Factory 4, Factory 3, Factory 2, Factory 5
- C. Factory 6, Factory 3, Factory 5, Factory 7
- D. Factory 6, Factory 8, Factory 7, Factory 2

E. Factory 8, Factory 3, Factory 2, Factory 4

Sol : Raw material cost for various factories are :

$$F_2 = 5300 - 800 - 45 - 2(400) = 3655$$

$$F_3 = 5800 - 900 - 60 - 2(550) = 3740$$

$$F_4 = 5500 - 800 - 68 - 2(450) = 3732$$

$$F_5 = 5400 - 600 - 75 - 2(600) = 3525$$

$$F_6 = 6000 - 875 - 65 - 2(400) = 4260$$

$$F_7 = 4900 - 500 - 85 - 2(350) = 3615$$

$$F_8 = 5300 - 600 - 70 - 2(420) = 3790$$

Hence option A is correct

Ans : A



70. Which of the factories listed in the options below has the lowest sales margin (*sales margin = profit per kurta divided by selling price per kurta*)?

- A. Factory 2 B. Factory 4 C. Factory 5 D. Factory 6 E. Factory 7

Sol : Lowest sales margin(For each factory)

$$F_2 = \frac{800}{5300}, F_4 = \frac{800}{5500}, F_5 = \frac{600}{5400}, F_6 = \frac{875}{6000}, F_7 = \frac{500}{4900}$$

Out of all these values , the lowest value is of F7. Hence E option

Ans : E

71. Abdul has received an order for 2,000 kurtas from a big retail chain. They will collect the finished pre-packaged kurtas directly from the factories, saving him the selling cost. To deliver this order, he can use multiple factories production. Which of the following options will ensure maximum profit from this order?

- A. Factory 1 B. Factories 2 and 3 C. Factories 4 and 6
D. Factories 3, 6 and 4 E. Factory 1 or Factory 7 or Factory 8

Sol : Selling cost is not to be added. So that would also be added to the profit. So let's solve it by options.

$$F_1 \rightarrow \text{Profit} = 775+60 = 835$$

$$F_2 \ \& \ F_3 \rightarrow \text{Profit} = 800+45=845 \ (F_2) \ \text{Profit} = 900+60 = 960 \ (F_3)$$

$$F_4 \ \& \ F_6 \rightarrow \text{Profit} = 800+ 68=868 \ (F_4) \ \text{Profit} = 875+65 = 940 \ (F_6)$$

$$F_3, F_6, F_4 \rightarrow F_3 \ (\text{profit}) = 960 \ F_6 \ (\text{profit}) = 940$$

$$F_4 \ (\text{profit}) = 868$$

It can't be F_1 or F_7 or F_8

$$\text{As profit for } F_7 = 500+85 = 585 \ \text{Profit for } F_8 = 600+70 = 670$$

Since the profit margins are highest in F_3 & F_6 and together they can produce 1900 kurtas, thus the maximum profit will be from factories F_3, F_4 & F_6 .

Hence option D

Ans : D

72. Abdul has introduced a new technology in all his factories. As a result, a worker needs just 1.5 hours to produce a kurta. If raw materials cost and selling cost remain the same, which of the factories listed in the option below will yield the highest profit per kurta?

- A. Factory 2 B. Factory 3 C. Factory 4 D. Factory 5 E. Factory 6

Sol: As per new technology, now worker needs 1.5 hrs to produce a kurta

Since labour cost for half an hour is decreased, So that value can be added to net profit. So let's find net profit for these factories:

$$F_2 = 800 + \frac{400}{2} = 1000$$

$$F_3 = 900 + \frac{550}{2} = 1175$$

$$F_4 = 800 + \frac{450}{2} = 1025$$

$$F_5 = 600 + \frac{600}{2} = 900$$

$$F_6 = 875 + \frac{400}{2} = 1075$$

So highest profit per Kurta is for F_3 .

Ans : B

SECTION – IV

GENERAL AWARENESS

Number of questions: 25

73. In which of the following countries is Tamil an official language?

- A. Andaman
D. Singapore
- B. Burma
E. Both C & D above
- C. Sri Lanka

Ans : E

74. The International Court of Justice is located in:

- A. Geneva
B. The Hague
C. Munich
D. New York
E. Washington DC

Ans : B

75. Which of the following countries is not a member of SAARC?

- A. Bhutan
B. Myanmar
C. Bangladesh
D. Nepal
E. The Maldives

Ans : B

76. Which of the following institutions are related to the Bretton Woods Agreement?

- A. International Labour Organization
B. International Monetary Fund
C. World Bank
D. World Trade Organization
E. Both B & C

Ans : E

77. In India, February 28th is celebrated as:

- A. Army Day
C. National Integration Day
E. Sadbhavana Divas
- B. International Yoga Day
D. National Science Day

Ans : D

78. Barak 8 is:

- A. The 8th president of USA.
B. A surface-to-air missile jointly developed by India and Israel
C. A total of 8 mines of Coal and Iron Ore in Barakar, near Jharkhand.
D. 8 villages, where only renewable energy is used, at the bank of Barak river, South Assam.
E. Eight tribes, all living in Barak Valley of Assam

Ans: B

79. Which of the followings is the oldest mountain range?

- A. Himalaya
B. Nilgiri Hills
C. Satpura
D. Karakoram
E. Aravalis

Ans : E

80. The words —Satyameva Jayate, inscribed on Indian currency are taken from:

- A. Mahabharat
D. Shakuntala
- B. Mundak Upanishad
E. A passage to India
- C. Rigveda

Ans : B

81. Who directed the Oscar winning film —Gandhil?

A. Ben Kingsley
D. Ritwik Ghatak

B. Richard Attenborough
E. Frank Darabont

C. David Lean

Ans : B

82. Which of the following options is a MISMATCH?

A. Andersen Consulting::Accenture

B. Isis Chocolates::Libeert

C. Brad's Drink::Pepsi

D. Quantum Computer Services :: AOL Inc.

E. Bearing Point:: KPMG Consulting Inc.

Ans: B

83. Which of the following companies is listed in the Fortune Global 500 Companies, in 2016?

A. GAIL (India) Limited

B. Oil and Natural Gas Corporation Limited (ONOC)

C. Patanjali

D. Rajesh Exports

E. Tata Consultancy Services

Ans : B

84. Which of the following brands is NOT currently owned by an Indian company?

A. Allen Solly

B. Dettol

C. La Opala

D. Monte

E. Royal Enfield

Ans : Carlo Some of the famous battles are listed below:

85. 1. The Battle of Cajamarca

2. The Battle of Huai-Hai

3. The Battle of Plassey

4. The Battle of Stalingrad

5. The Battle of Waterloo

6. The Battle of Yorktown

Which of the followings is the correct chronological order of the above battles?

A. 1-2-3-4-5-6

B. 1-2-6-3-5-4

C. 1-3-6-5-4-2

D. 2-1-3-6-4-5

E. 2-6-1-3-4-5

Ans : C

86. Which of the followings is a WRONG combination?

A. Maldives – Maldivian Rupee

B. Bangladesh – Bangladeshi Taka

C. Bhutan – Bhutanese Ngultrum

D. East Timor – US Dollar

E. Indonesia – Indonesian Rupiah

Ans : A

87. Which of the following is a WRONG combination?

- A. Willis Haviland Carrier- Microwave compatible Tiffin Carrier
- B. Alexander Bell – Telephone
- C. Alfred Nobel – Dynamite
- D. Elisha Graves Otis - Safety Elevator
- E. John Boyd Dunlop - Pneumatic Tyre

Ans : A

88. Which of the following banks is recently in the news because its employees opened Additional relationship accounts without its customer's permission?
- A. Citibank
 - B. HSBC
 - C. Standard Chartered
 - D. Wells Fargo
 - E. Bank of Nova Scotia

Ans : D

89. Which of the followings is in the outermost reaches of the solar system?
- A. Orion Nebula
 - B. Andromeda Galaxy
 - C. Oort Cloud
 - D. Asteroid belt
 - D. Interstellar wormhole

90. Which Cult television series celebrated its 50th anniversary in 2016?
- A. Frasier
 - B. That 70's Show
 - C. Veep
 - D. Star Trek
 - E. Buniyaad

Ans : D

91. Bogota, Lima and Ouito are the capitals of:
- A. Colombia, Peru and Ecuador respectively.
 - B. Warsaw, Madrid and Montevideo respectively.
 - C. Brazil, Paraguay, and Argentina respectively.
 - D. Nigeria, Sudan and Zimbabwe respectively.
 - E. None of the above

Ans : A

92. The Yazidis are:
- A. Mythological creatures in the Bible
 - B. Mystery creatures sighted in the Greenland
 - C. Ethnic and religious minority in Iraq
 - D. Members of a Islamic sect in Hungary
 - E. Ethnic and religious minority in Pakistan

Ans : C



93. Where is Hadrian's Wall located?

- A. China B. Afghanistan C. Rome D. England E. Ladakh

Ans: C

94. Which of the following animals' conservation status was changed from —endangered to —vulnerable by WWF recently?

- A. Giant panda B. Tigers C. Orangutan D. Asian Elephant E. Blue Whale

Ans: A

95. In which of the following countries, both the tropic of Capricorn and the Equator pass through?

- A. Brazil B. Argentina C. Peru D. Chile E. Venezuela

Ans : A

96. Which of the following novelists has won the Booker Prize?

- A. Ruskin Bond B. R.K. Narayan C. Amitav Gosh D. Anita Desai E. Kiran Desai

Ans : E

97. Rodrigo Duterte is associated with which of the following nations?

- A. USA B. Russia C. Philippines D. Indonesia E. Vietnam

Ans : C

