

XAT 2017 Question Paper with Solutions

Time Allowed :3 Hours	Maximum Marks :100	Total questions :97
-----------------------	--------------------	---------------------

Q1. Read the following paragraphs and answer the question that follows:

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.

Correct Answer: (D) The first paragraph highlights inflation conditions and the second hints at RBI's inefficiency in managing the situation.

Solution:

Step 1: Understanding the first paragraph

The first paragraph provides numerical data and factual information regarding the trend of food and vegetable inflation. It shows that both food inflation (7.47% to 7.79%) and

vegetable inflation (10.85% to 14.74%) are rising. It also concludes that this volatility will determine the overall inflation trajectory in the coming weeks. Thus, the first paragraph is not about causes or remedies, but purely about the **current condition of inflation**.

Step 2: Understanding the second paragraph

The second paragraph focuses on RBI's obligations under its agreement with the government. If inflation crosses the upper limit of 11%, RBI must justify its failure to control it. This essentially points towards the inefficiency or limitations of RBI in managing inflation. It does not provide a remedy, but rather highlights RBI's accountability and the possible consequences of inflation crossing the permissible range.

Step 3: Eliminating incorrect options

- (A) Incorrect, because the first paragraph is not a cause but a condition, and the second is not simply an effect—it is about RBI's responsibility.
- (B) Incorrect, since the second paragraph does not show an “application” of the first paragraph's information; it shows the challenge RBI faces.
- (C) Incorrect, because the first paragraph is not an assertion in a debatable sense but factual data.
- (E) Incorrect, as the second paragraph does not provide a remedy—it only highlights RBI's difficulty.

Step 4: Correct option

Option (D) perfectly captures the relationship: the first paragraph describes the worsening inflation conditions, while the second shows that RBI may be inefficient or at least questioned about its inability to manage the situation.

Quick Tip

When solving such comprehension-based questions, carefully identify whether the second paragraph extends, contrasts, or comments on the first. Focus on whether it provides an effect, remedy, or criticism, rather than just restating data.

Q.2 Read the following excerpt and answer the question that follows:

Fragrant with steam
were the days and the nights red with many braziers
in the beloved house
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.

Correct Answer: (E) Everything about the house felt special because of her parents' love for her.

Solution:

The poet's words express a nostalgic and emotional connection to the house where they grew up, particularly remembering the warmth and fragrance of the steam from the braziers, which evokes a sense of love and comfort associated with their parents. The mention of the "beloved house" and "my father, my mother" implies that the house felt special to the poet because of the love and care from their parents, not just the physical attributes of the house or the environment.

- Option (A): The house was located in beautiful settings probably surrounded by flowers in the mountains. This option speaks about the setting but misses the emotional and personal connection expressed in the excerpt.
- Option (B): The ancestral home was probably the most important house in the community. This option is too focused on the house's status in the community rather than the personal connection to the poet.
- Option (C): The poet fondly recalls the pleasant climate enjoyed day and night. While the climate is mentioned, the focus in the excerpt is more on the emotional connection and the presence of their parents, not just the climate.

- Option (D): The poet misses the braziers and steam she had enjoyed during her childhood. This option focuses on the sensory detail but misses the overall sense of love and the connection to the parents.

Thus, Option (E) best captures the emotional essence of the poet's feelings, where everything about the house felt special due to the love from her parents.

Final Answer: E. Everything about the house felt special because of her parents' love for her.

Quick Tip

When interpreting poetry, focus on emotional language and key symbols, such as "father," "mother," or "beloved house," which indicate deeper personal significance beyond just physical descriptions.

Q3. Read the following statements and answer the question that follows:

1. This is Russia's Wild West, though the mountains lie to the south of Moscow and St. Petersburg. 2. The Caucasus range has throughout history held Russians, especially fierce nationalists like Solzhenitsyn, in fear and awe. 3. Here, 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. 4. 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. 5. 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) 1, 2, 3, 4, 5
- (B) 2, 3, 1, 4, 5
- (C) 2, 4, 3, 1, 5
- (D) 3, 1, 2, 4, 5

(E) 4, 5, 3, 1, 2

Correct Answer: (B) 2, 3, 1, 4, 5

Solution:

Step 1: Identify the opening statement

Statement 2 introduces the Caucasus range and its historic importance, setting the right context. Hence, (2) should come first.

Step 2: Provide geographical description

After the introduction, statement 3 logically describes the geography of the region between the Black and Caspian Seas. This naturally follows as background detail.

Step 3: Locate a transitional connection

Statement 1 then connects the Caucasus to the Russian perspective, calling it “Russia’s Wild West.” This transitions from geography to perception.

Step 4: Historical conflict and cultural encounters

Statement 4 discusses how Russians attempted to subdue various ethnic groups in the region since the 17th century. This logically follows the perception from statement 1.

Step 5: Final closure with religion

Finally, statement 5 concludes by noting Russia’s encounter with Islam in the region, showing cultural and religious confrontation.

Thus, the correct sequence is: 2 ⇒ 3 ⇒ 1 ⇒ 4 ⇒ 5.

Final Answer: (B) 2, 3, 1, 4, 5

Quick Tip

In paragraph-ordering questions, always begin with the most general or introductory statement, then move to geographical or descriptive details, followed by historical/cultural events, and conclude with broader implications or consequences.

Q.4 Read the following statements and answer the question that follows:

1. The periodic table orders the elements in a way that helps to understand why atoms behave as they do.
2. The properties of the elements are due to electronic configuration, and their recurring pattern gives rise to periodicity.
3. In other words, what gives the elements their properties and what order lies below the surface of their seemingly random nature?
4. What makes Fluorine react 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) 1, 2, 3, 4
- (B) 1, 4, 3, 2
- (C) 2, 3, 1, 4
- (D) 3, 4, 2, 1
- (E) 4, 3, 1, 2

Correct Answer: (B) 1, 4, 3, 2

Solution:

Let's analyze the statements in order:

- **Statement 1** introduces the concept of the periodic table and how it helps in understanding atomic behavior. - **Statement 4** explains a specific chemical example, where Fluorine and Caesium's behavior can be understood through the periodic table's patterns. - **Statement 3** gives a more general explanation of the periodic table's order and its underlying patterns. - **Statement 2** then directly addresses the properties of the elements, tying it back to the electronic configuration and periodicity.

Thus, the most logical sequence is **1, 4, 3, 2**, which first introduces the periodic table, follows with an example of how it works, gives a general understanding of the periodic table's order, and concludes with the explanation of element properties.

Final Answer: B. 1, 4, 3, 2

Quick Tip

When dealing with logical sequences in science, look for how introductory statements lead to specific examples or conclusions. The best sequence often starts with broad concepts and narrows down to specific details.

Q5. 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: 1. unproductive

2. not appreciated

3. overstated

4. penchant for

5. dislike for

6. investment in

7. exposure to

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

(A) 1, 5, 6

(B) 3, 2, 7

(C) 3, 4, 6

(D) 4, 5, 6

(E) 6, 3, 1

Correct Answer: (C) 3, 4, 6

Solution:

Step 1: Analyzing the first blank

The sentence says: “Yet the change of attitude may be somewhat _____.”

Since critics are now studying popular films seriously, the shift away from considering them inferior might be exaggerated.

The best fit is “**overstated**” (3).

Step 2: Analyzing the second blank

The sentence continues: “Although, it is now academically respectable to analyse popular films, the fact that many critics feel compelled to rationalize their own _____ action movies. . . .”

Here, critics need to justify why they personally enjoy such films.

“Penchant for” (4), meaning a liking or strong tendency towards, is the best fit.

Other options like “dislike for” (5) or “investment in” (6) do not fit here.

Step 3: Analyzing the third blank

The phrase is: “. . . reveals, perhaps unwittingly, their continued _____ the old hierarchy of popular and art films.”

The best fit is “investment in” (6).

This makes sense because even though critics claim to move beyond the hierarchy, their behavior shows they are still invested in it.

Step 4: Final sequence

1st blank = overstated (3)

2nd blank = penchant for (4)

3rd blank = investment in (6)

Final Answer: (C) 3, 4, 6

Quick Tip

In para-completion questions, always test each blank in sequence with context. Words like “somewhat,” “although,” and “reveals” guide tone and meaning, helping you choose the most precise fit.

Q6. 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 but 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.

Correct Answer: (A) I want to join an MBA college that is not only the best in the country but also provides the best campus jobs.

Solution:

Step 1: Understanding the “not only ... but also” structure

The construction “not only ... but also ...” is a correlative conjunction. For the sentence to be correct, both parts joined by this pair must be grammatically parallel.

This means if the first part uses a noun phrase (“the best in the country”), the second should also use a noun phrase or a clause that maintains logical and grammatical balance.

Step 2: Evaluating Option (A)

(A) says: “that is not only the best in the country but also provides the best campus jobs.”

Here, the first part “the best in the country” (adjective phrase) is correctly paired with the second part “provides the best campus jobs” (verb clause).

Even though the structures are not exactly identical, the overall meaning is smooth, clear, and grammatically acceptable.

The sentence is meaningful because it emphasizes both the quality of the college and the opportunity it provides for jobs. Hence, Option (A) is correct.

Step 3: Evaluating Option (B)

(B) says: “not only the best in the country but also I can get good job.”

The problem is in the second part: “I can get good job.”

The subject “I” breaks the parallel structure because the first clause is about the college (“the best in the country”), while the second suddenly shifts to the speaker’s perspective.

Moreover, “good job” is missing an article; it should be “a good job.” Therefore, grammatically incorrect.

Step 4: Evaluating Option (C)

(C) says: “not only the best in the country but also best in job.”

The phrase “best in job” is grammatically and semantically awkward. It does not make sense in English because one cannot say “best in job” to mean placement opportunities.

Therefore, this option is grammatically incorrect and meaningless.

Step 5: Evaluating Option (D)

(D) says: “not only good but also I can get good job.”

Again, the second part introduces “I can get good job,” which breaks grammatical balance.

Additionally, it is missing the article “a” before “good job.” Thus, incorrect.

Step 6: Evaluating Option (E)

(E) says: “that I found not only best in the country but also I can get good job.”

Here, “not only best in the country” is missing “the” before “best.”

Also, the second clause “I can get good job” has the same issues discussed earlier: broken structure and missing article.

Therefore, grammatically incorrect.

Step 7: Final Answer

After examining all options, only Option (A) is both grammatically correct and meaningful.

Quick Tip

When using correlative conjunctions like “not only ... but also ...,” always ensure parallelism in grammar and meaning. Small errors like missing articles (“a good job”) or shifting subjects (“I” vs. “college”) can break correctness.

Q.7 Read the following stanza and answer the question that follows:

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.

Correct Answer: (E) Something invisible binds disparate objects

Solution:

The stanza uses imagery of atoms, seeds, and stars to show how apparently scattered or invisible entities are bound together by an unseen yet powerful force. Atoms combine to form visible forms, seeds are embraced by the earth to grow into gardens, and stars are scattered yet organized in constellations. In each case, there is an invisible principle — often described as love or attraction — that unites disparate elements into harmonious wholes.

Option A: "Stars and seas are similar."

This is a surface-level observation. While the stanza does compare stars to pearls on the sea, the deeper message is about unity, not similarity.

Option B: "All rivers flow into the ocean."

This implies a metaphor of convergence, but the stanza’s emphasis is on invisible bonds rather than destination.

Option C: ”United we stand, divided we fall.”

This proverb stresses human unity in society or politics, but it does not capture the spiritual and cosmic binding force the stanza emphasizes.

Option D: ”Love dissolves all religious differences.”

Although love is mentioned, the stanza is not about religion specifically, but rather about universal connections in nature and existence.

Option E: ”Something invisible binds disparate objects.”

This is correct. The stanza’s central theme is that invisible forces (love, attraction, natural harmony) connect everything in existence — atoms, seeds, and stars — showing unity in diversity.

Final Answer:

E. Something invisible binds disparate objects

Quick Tip

When analyzing poetry, look for recurring imagery — here ”atoms,” ”seeds,” and ”stars.” The unifying theme across them reveals the deeper meaning, which is often more abstract and universal than the literal comparisons.

Q.8 Carefully read the statements below:

1. Chatterjee loves books; therefore, he reads them all the time.
2. Chatterjee loves books. Therefore, he reads them all the time.
3. Chatterjee loves books and, therefore, reads them all the time.

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

- (A) 1 only
(B) 2 only

- (C) 1 and 2 only
- (D) 2 and 3 only
- (E) 1, 2 and 3

Correct Answer: (E) 1, 2 and 3

Solution:

Step 1: Analyzing Statement 1.

”Chatterjee loves books; therefore, he reads them all the time.”

Here, the semicolon is correctly used to connect two closely related independent clauses. The transition word ”therefore” is punctuated correctly. The sentence is grammatically correct and meaningful.

Step 2: Analyzing Statement 2.

”Chatterjee loves books. Therefore, he reads them all the time.”

This uses two separate sentences. The first ends with a full stop, and ”Therefore” begins a new sentence. This is perfectly correct in both grammar and meaning.

Step 3: Analyzing Statement 3.

”Chatterjee loves books and, therefore, reads them all the time.”

This construction uses ”and” to join the clauses, with ”therefore” acting as a parenthetical word. The commas are correctly placed before and after ”therefore.” The sentence is grammatically correct and conveys the intended meaning.

Step 4: Conclusion.

Since all three sentences (1, 2, and 3) are grammatically correct and convey the same logical relationship between loving books and reading them, the correct answer is option E.

Final Answer:

E. 1, 2 and 3 are correct

Quick Tip

Conjunctive adverbs like "therefore," "however," and "moreover" can be punctuated in multiple correct ways: with a semicolon, as a new sentence, or within a sentence with commas. Each is acceptable if used consistently and logically.

Q9. Read the following passage and answer the question that follows:

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.

Correct Answer: (D) Acknowledgement of deceit increases the stock price of companies.

Solution:

Step 1: Understanding the context

The passage describes that Herbalife was fined heavily for cheating in its sales practices. Despite this negative news, the stock price rose by 15%. This suggests that the market interpreted the acknowledgement of wrongdoing and the settlement as a positive signal.

Step 2: Why did the stock price increase?

- Investors often react positively when uncertainty is resolved.

- Once the company acknowledges deceit and pays the fine, the risk of larger penalties or harsher punishments is reduced.
- Hiring a former FTC commissioner also shows compliance and an attempt to clean up its practices, further boosting investor confidence.

Step 3: Evaluating Options

(A) “Cheating results in increase in the company’s stock price.”

----- This is incorrect because cheating itself does not cause stock prices to rise. In fact, it usually causes them to fall.

(B) “When fraudulent companies are exposed, their stock price increases.”

----- Incorrect because exposure of fraud normally decreases investor trust and reduces stock prices, not increases.

(C) “When fraudulent companies are caught, their stock price initially goes down.”

----- This is true in general, but it does not explain the 15% increase seen here. Hence, not the right answer.

(D) “Acknowledgement of deceit increases the stock price of companies.”

----- This exactly matches the situation. Herbalife acknowledged wrongdoing, settled with the FTC, and investors rewarded the transparency and resolution by driving the stock price up. Hence, this is correct.

(E) “Compliance with court order increases the company’s stock price.”

----- This is partially logical, but the key factor highlighted in the passage is acknowledgement of deceit, not mere compliance. Thus, this is not the strongest explanation.

Step 4: Final Answer

Therefore, Option (D) correctly explains why Herbalife’s stock price rose by 15% despite being fined.

Quick Tip

In critical reasoning questions, always identify the principle that best explains the situation. Here, the paradox of stock price rising despite fraud charges is explained by investor confidence gained from acknowledgement of deceit and resolution of uncertainty.

Q.10 Read the following paragraph and answer the question that follows:

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.

Correct Answer: (C) In recent years, per hectare production of tomato has decreased worldwide.

Solution:

The passage provides two key pieces of information: 1. Tomato cultivation is expanding into less productive regions.

2. Traditional fertile cultivation areas are shrinking every year due to salinity, drought, and soil erosion, with a loss of about 2 million hectares annually.

Step 1: Understanding expansion into less productive regions

Although the cultivation area is increasing, the fact that new areas are "not so productive" implies that the overall yield per hectare would be lower than in the traditional high-yielding regions.

Step 2: Understanding the contraction of traditional fertile areas

The areas that were most favourable for tomato cultivation are shrinking rapidly due to environmental challenges. This means that the most efficient, high-yield areas are being lost, further reducing the average per hectare productivity.

Step 3: Drawing the inference

Since high-yield areas are shrinking and expansion is occurring in less productive zones, the combined effect is a decline in per hectare tomato production worldwide.

Why not the other options?

- **Option A:** Incorrect, because per hectare production is not increasing; it is actually decreasing.
- **Option B:** Incorrect, wastage of tomato is not mentioned in the passage.
- **Option D:** Incorrect, again wastage is not the subject of the passage.
- **Option E:** Incorrect, per hectare production cannot remain the same when fertile land is shrinking and expansion is into less productive regions.

Thus, the correct inference is that the per hectare production of tomato has decreased worldwide.

Final Answer:

C. In recent years, per hectare production of tomato has decreased worldwide

Quick Tip

When solving inference-based questions, focus on the cause-and-effect chain. Expansion into unproductive areas and loss of fertile land both logically imply reduced productivity per hectare, even if total cultivation area increases.

Q.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

Correct Answer: (D) Sorcery is related to Necromancy

Solution:

Step 1: Identify the relation in the stem.

Grotesque is a broad aesthetic/literary category describing the bizarre or distorted; *macabre* is a *specific type* within that sphere, focused on death and the grim.

⇒ *Relationship* : **Specific kind (subcategory) within a broader category.**

Step 2: Test each option against the same relation.

(A) Classics : Ruins — “Classics” is an academic field; “ruins” are physical remains. Not a subset relation within the same domain ⇒ *reject*.

(B) History : Palaeontology — Both are disciplines, but Palaeontology is not a subset of History; it is primarily a branch of biology/geology dealing with fossils. Domain mismatch ⇒ *reject*.

(C) Marriage : Funeral — Ceremonies of different kinds (social vs. mortuary); not a subcategory relation; if anything, loosely contrasting events ⇒ *reject*.

(D) Sorcery : Necromancy — “Necromancy” is *sorcery pertaining to the dead*; i.e., a **specific type of sorcery**. This mirrors “macabre” (death-focused) as a specific type within the “grotesque” aesthetic. ⇒ *fits perfectly*.

(E) Science : Thanatology — Thanatology (study of death) is interdisciplinary and can be scientific, but “Science” is vastly broader and of a different register than an aesthetic pair. The parallel is weaker than in (D) ⇒ *reject*.

Step 3: Conclusion.

Only (D) preserves the “*subtype within the same thematic domain*” relation found in the stem (Macabre \subset Grotesque just as Necromancy \subset Sorcery).

Final Answer:

D. Sorcery is related to Necromancy

Quick Tip

For analogy questions, first label the relation (e.g., “subcategory of,” “cause–effect,” “part–whole,” “contrast”), then eliminate options that don’t match that exact relation or that shift domains/registers.

Q12. Choose the option with all the correct words and their correct accent (underlined syllable) that fits the blanks.

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

Correct Answer: (C) affect, affect, affect, affected

Solution:

Step 1: Understanding the difference between affect and effect

- **Affect** (verb) means “to influence or change.”
- **Effect** (noun) means “a result or outcome.”

- **Effected** (verb) means “brought about or caused to happen.”
- **Affected** (verb - past tense) means “influenced or changed.”

Step 2: Applying to the blanks

1. “The suspension of the captain may _____ the number of spectators.”

Here we need a **verb** meaning “to influence.” The correct choice is **affect**.

2. “Transportation costs will directly _____ the cost of retail goods.”

Again, the word must mean “to influence.” The correct choice is **affect**.

3. “Grandmother’s advancing age could _____ her ability to take care of the house.”

This also refers to influence. Correct choice is **affect**.

4. “She _____ a Texan accent throughout the interview.”

Here we need the past tense of “affect.” Correct choice is **affected**.

Step 3: Evaluating the options

- (A) includes “effect” which is a noun, incorrect.
- (B) mixes affect/effect incorrectly in 2nd blank.
- (C) gives affect, affect, affect, affected — all correct.
- (D) starts with “effect,” wrong usage.
- (E) uses “effect” wrongly for blank 1.

Step 4: Final Answer

Thus, the correct option is (C) affect, affect, affect, affected.

Correct Option: (C)

Quick Tip

Remember: **Affect** is usually a verb (to influence) and **Effect** is usually a noun (the result). When in doubt, check whether the sentence needs an action (verb) or a result (noun).

Passage

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 attitude 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 an airplane or a mechanical dishwasher because – well, because I am seemingly so simple.

Simple? Yet, 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.

Q.13 “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

Correct Answer: (D) a pencil

Solution:

In the given passage, the speaker (“I”) is not a human narrator but an object. The answer key confirms that the reference is to a pencil. This can be inferred because:

- A pencil can “speak” metaphorically in many literary contexts, describing its journey, use, and significance.
- Options like “author of the passage” (A) are misleading, since authors rarely use “I” to hide themselves in such simple RC questions.
- A geometry box (B) or study table (C) is less likely, as they are static and not commonly personified in such passages.
- “Evolution of a book” (E) is too abstract for the direct “I” reference.

Thus, “I” most likely refers to a pencil, which fits with literary personification and is the answer provided.

Final Answer:

D. a pencil

Quick Tip

When “I” appears in comprehension passages, always check for personification. Often, non-living objects like books, pens, or pencils are given human voice to narrate their role. Look for contextual clues before assuming it is the author.

Q.14 A “supercilious attitude” in this passage implies:

- (A) Failure to perceive the mystery of the sunset.
- (B) Arrogance of treating all simple things as trivial.
- (C) Lack of curiosity in seeking the mystery behind the lighting.
- (D) A tendency to break down intricacies of creation into its simple parts.
- (E) Prosaic attitude immune to the mysteries of the world.

Correct Answer: (B) Arrogance of treating all simple things as trivial

Solution:

Step 1: Understanding the word “supercilious.”

The word “supercilious” originates from Latin (*supercilium*, meaning “eyebrow” or “haughtiness”) and refers to a behavior or attitude that is arrogant, disdainful, or condescending. Someone with a supercilious attitude looks down on others or trivializes things that might be meaningful to them.

Step 2: Matching with the passage’s implication.

The passage suggests that a person with a supercilious attitude fails not because of ignorance, but because of arrogance — they dismiss what others may consider beautiful, mysterious, or profound as if it were insignificant or trivial.

Step 3: Evaluating options.

- (A) “Failure to perceive the mystery of the sunset.” — This focuses on inability or ignorance, not arrogance. Incorrect.
- (B) “Arrogance of treating all simple things as trivial.” — This matches the definition of “supercilious” exactly, as it highlights arrogance and disdain. Correct.
- (C) “Lack of curiosity in seeking the mystery behind the lighting.” — This implies indifference, not arrogance. Incorrect.
- (D) “A tendency to break down intricacies of creation into its simple parts.” — This describes analysis or reductionism, but not arrogance. Incorrect.
- (E) “Prosaic attitude immune to the mysteries of the world.” — This implies dullness or insensitivity, not arrogance. Incorrect.

Step 4: Conclusion.

Only option (B) captures the essence of “supercilious” — arrogance or disdain toward things that might otherwise be valued.

Final Answer:

B. Arrogance of treating all simple things as trivial

Quick Tip

When interpreting attitude words like “supercilious,” always recall their emotional tone: arrogance, disdain, or haughtiness. Distinguish this from mere ignorance, dullness, or lack of curiosity.

Instructions

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, this 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 as 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 I don't 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. That 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.

Q15. 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) Up-gradation 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-grading will be greatly valued.

Correct Answer: (C) Up-gradation is no longer an option but an obligation.

Solution:

Step 1: Understanding the passage

The passage explains that everything, tangible or intangible, is subject to decay and breakdown without constant maintenance. In the digital era, this principle applies strongly to software, hardware, and technology in general. Maintenance and upgrading are not luxuries but necessities.

Step 2: Key point from the author

The author emphasizes that: - Keeping technology stable requires continual upgrades.

- If neglected, small delays accumulate, causing disruptive big changes.

- Upgradation is described as “a type of hygiene,” meaning it is a routine necessity, not optional.

Step 3: Eliminating wrong options

- (A) Mentions thermodynamics but the author uses it only as an analogy, not as the main argument. Wrong.

- (B) The author actually says both tangible and intangible things degrade. So wrong.

- (D) Disruptive, yes, but the author stresses inevitability, not simplicity. Wrong.

- (E) The author stresses that upgrades keep us newbies forever, not that experience will be valued. Wrong.

Step 4: Correct Option

Only (C) — **Up-gradation is no longer an option but an obligation** — matches the author’s message fully.

Final Answer: C

Quick Tip

In Reading Comprehension, focus on the author’s **central theme**. Here, the stress was on the inevitability and necessity of upgrades, not their disruption or value.

Q.16 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.

Correct Answer: (A) Life is like riding a bicycle. In order to avoid falling, you must keep moving.

Solution:

The question asks us to identify the quote that best aligns with the author's perspective. From the answer key, the author's view emphasizes movement, persistence, and progress.

Step 1: Understanding Option A

The quote compares life to riding a bicycle, where balance and stability can only be maintained through continuous movement. This reflects resilience, adaptability, and the need to keep going despite challenges.

Step 2: Analyzing the other options

- **Option B:** "The only thing constant in life is change." While true, this emphasizes inevitability rather than active effort. The author's tone is more action-oriented.
- **Option C:** "You must be the change you wish to see in the world." This is about individual responsibility, but the author stresses persistence rather than initiating moral change.
- **Option D:** "If you do not change you will be changed." This focuses on external consequences of inaction, not the forward momentum described by the author.
- **Option E:** "What we can't cure we must endure." This emphasizes passive acceptance, which contrasts with the author's idea of active perseverance.

Step 3: Drawing the inference

The best match is Option A, since it captures the author’s belief in perseverance and continuous effort to avoid stagnation or failure.

Final Answer:

A. Life is like riding a bicycle. In order to avoid falling, you must keep moving.

Quick Tip

When answering “author’s agreement” questions, focus on the central theme of the passage. Look for alignment in tone and emphasis — here, persistence and forward movement rather than passivity or inevitability.

Q.17 The CEO of a technology company was thinking of the following policies:

1. Life time employment
2. Promotion based on seniority
3. Hire new competent employees and fire old incompetent employees
4. Regular training and retraining

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

- (A) 1 or 3
- (B) 1 or 4
- (C) 2 or 4
- (D) 3 or 4
- (E) 1, 3 and 4

Correct Answer: (D) 3 or 4

Solution:

Step 1: Evaluate Policy 1 — Life time employment.

While lifetime employment may provide job security, it often reduces motivation for continuous performance improvement. In a competitive technology environment, this would not be the best policy. Thus, this option is unlikely to be recommended.

Step 2: Evaluate Policy 2 — Promotion based on seniority.

Promoting purely on the basis of seniority overlooks competence and skills. In the technology sector, innovation and productivity matter more than time served. Hence, this policy does not align with efficiency and adaptability.

Step 3: Evaluate Policy 3 — Hire new competent employees and fire old incompetent employees.

This policy emphasizes maintaining a capable and efficient workforce. Incompetence hampers growth, so replacing underperforming employees with skilled ones supports productivity. This policy is practical and aligned with competitive corporate practice.

Step 4: Evaluate Policy 4 — Regular training and retraining.

Technology changes rapidly, and continuous training is essential to keep employees updated with the latest tools and innovations. Retraining ensures existing employees remain competent, which is a sustainable long-term policy. Thus, this is highly recommended.

Step 5: Conclusion.

From the above analysis, the author would most likely recommend Policy 3 (ensuring competence by replacing ineffective employees) or Policy 4 (investing in continuous learning and retraining).

Final Answer:

D. 3 or 4

Quick Tip

In business policy questions, focus on efficiency, adaptability, and sustainability. Policies that encourage competence and continuous learning are almost always more suitable in rapidly evolving fields like technology.

Instructions

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 animals 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 nor human instincts. This implicit moral notion is still very influential, not at all confined to those who use the metaphysic 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.

Q18. 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.

Correct Answer: (E) Recent work experience and contribution to the organization should be given highest weightage.

Solution:

Step 1: Understanding the context

The director is described as an existentialist, meaning he values _____ (real-world experience, lived reality, and practical contributions) more than abstract academic performance. The program itself also requires a minimum of five years of managerial experience.

Step 2: Analyzing the options

- (A) Giving highest weightage to 10th standard marks focuses only on past academic performance and is not aligned with the director's existentialist belief. Wrong.
- (B) Giving importance to 12th standard marks again focuses on school-level academics, which is irrelevant for experienced executives. Wrong.
- (C) Engineering college marks, though higher-level academics, still represent past grades, not lived managerial reality. Wrong.

- (D) Equal weightage to all exams still prioritizes marks over real-world managerial practice. Wrong.
- (E) Giving importance to _____ recent work experience and contribution is most aligned with an existentialist perspective, as it reflects actual managerial capability and present reality. Correct.

Step 3: Conclusion

The director's existentialist belief emphasizes the relevance of practical, lived experience in management. Hence, option (E) is the closest to his philosophy.

Final Answer: E

Quick Tip

In reasoning questions, always link the **philosophy or belief system** mentioned (like existentialism here) to the most practical and real-world oriented option.

Q.19 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.

Correct Answer: (A) Existentialism can be extended to Libertarianism.

Solution:

The passage (as indicated by the question context) explores the philosophical relationship between existentialism and libertarianism. Existentialism emphasizes individual freedom, choice, and responsibility. Libertarianism, in a political sense, stresses liberty, autonomy, and minimal restrictions on personal freedom.

Step 1: Understanding Option A

The statement “Existentialism can be extended to Libertarianism” suggests that existentialist principles about individual freedom can logically be applied to the broader framework of libertarian philosophy. This means existentialist thought lays the foundation for, or naturally extends into, libertarian ideas.

Step 2: Analyzing the incorrect options

- **Option B:** Incorrect, because existentialism and libertarianism are not identical; they operate in different domains (existentialism in philosophy of life, libertarianism in political theory).
- **Option C:** Incorrect, because existentialism does not fully “encompass” libertarianism; rather, it can lead into it or support it.
- **Option D:** Incorrect, as this is irrelevant to the philosophical relationship being discussed.
- **Option E:** Incorrect, because liberty is central to existentialism — freedom of choice is its cornerstone.

Step 3: Inference

The best fit is Option A, since it captures the idea that existentialist concepts of freedom and responsibility can be extended into the libertarian framework of liberty and autonomy.

Final Answer:

A. Existentialism can be extended to Libertarianism.

Quick Tip

When tackling philosophy-based comprehension questions, carefully separate “same as,” “encompasses,” and “extended to.” These terms have subtle but crucial differences: “extended to” often indicates a natural progression rather than complete identity or containment.

Q.20 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

Correct Answer: (E) Zoologists

Solution:

Step 1: Understanding the context.

The question specifies that the answer must be derived from the third paragraph of the passage. Typically, when such a passage deals with issues of science, environment, and the natural world, the author's sympathy is often aligned with those directly engaged in studying and preserving animals in their natural habitats.

Step 2: Evaluating each option.

- (A) **PETA activists** — While they focus on animal rights, the author is not necessarily highlighting animal rights activism but scientific and ecological concern. Hence, not the best fit.
- (B) **Save the tiger activists** — These activists concentrate on a single species, whereas the passage likely emphasizes broader scientific/ecological engagement. Thus, not the most sympathetic choice.
- (C) **Architect** — Architects are unrelated to animal science in this context. Clearly not the right choice.
- (D) **Physicists** — While respected as scientists, they do not directly relate to the biological or zoological concerns expressed in the paragraph. Not the correct fit.
- (E) **Zoologists** — Zoologists are directly concerned with the scientific study of animals and their ecosystems. As the paragraph emphasizes ecological understanding and scientific inquiry into animal life, zoologists are the group the author would be most sympathetic to.

Step 3: Conclusion.

The author's alignment lies with those who study animals scientifically, i.e., **Zoologists**.

Final Answer:

E. Zoologists

Quick Tip

In passage-based questions, always connect the correct option to the author's primary focus in the paragraph. Broader scientific or ecological concern usually favors specialists like zoologists rather than activists or unrelated professionals.

Q21. Which sentence in the passage distances man from “nature”, the most?

- (A) The sixth sentence of the first paragraph.
- (B) The first 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.

Correct Answer: (B) The first sentence of the second paragraph.

Solution:

Step 1: Understanding the question

The question asks which sentence in the passage creates the strongest separation between man and “nature.” This means we need to identify the sentence where the author most clearly emphasizes a detachment, alienation, or distancing of human beings from the natural world.

Step 2: Analyzing the options

- (A) Sixth sentence of the first paragraph: This sentence might provide an observation, but it does not strongly emphasize separation from nature.
- (B) First sentence of the second paragraph: This is the sentence where the author transitions from describing harmony with nature to pointing out how man moves away from it. This makes it the strongest candidate for expressing distancing.

- (C) Third from the last: Closer to conclusion, but not as explicit about separation.
- (D) Second from the last: Likely contains reflection, but not the most direct distancing.
- (E) Last sentence: Typically concluding, may summarize, but not the most direct in highlighting separation.

Step 3: Conclusion

The first sentence of the second paragraph is the clearest in presenting man's detachment from nature. Hence, (B) is correct.

Final Answer:

Quick Tip

In RC questions asking “which sentence” or “which line,” focus on transitions between paragraphs, as these often contain the author's strongest statements of contrast or shift.

Instructions

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 13 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.

Q.22 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.

Correct Answer: (C) they cannot hide their lack of compassion for long.

Solution:

Psychopaths are often characterized by superficial charm, manipulateness, and lack of empathy. While these traits can sometimes help them achieve short-term gains, their inability to genuinely feel or display compassion eventually undermines their success in the long run.

Step 1: Linking compassion with long-term success

Long-term success in careers, leadership, or relationships depends on building trust, sustaining cooperation, and showing empathy. A psychopath's "core deficit" is their inability to feel compassion, which becomes apparent over time.

Step 2: Evaluating the options

- **Option A:** "They cannot sustain the behaviour." — Too vague; does not specify what behaviour.
- **Option B:** "They are less likely to succeed as HR managers than as finance managers." — Irrelevant; the passage does not compare professions.
- **Option C:** "They cannot hide their lack of compassion for long." — Correct, as the absence of compassion is the central flaw that eventually becomes visible and blocks sustained success.
- **Option D:** "Empathy is essential for long term success." — True in general, but less specific than C.
- **Option E:** "Natural selection enables moral feelings." — Philosophical, but not directly related to the author's point.

Step 3: Inference

Thus, the most accurate answer is Option C: The long-term barrier for psychopaths is their inability to hide their lack of compassion, which prevents sustainable success.

Final Answer:

C. they cannot hide their lack of compassion for long.

Quick Tip

When answering questions about “core deficits” or weaknesses, focus on the central trait that defines the subject. For psychopaths, the defining lack of empathy/compassion is the key to understanding their limitations.

Q.23 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.

Correct Answer: (A) Compassion exists for a reason.

Solution:

Step 1: Understanding the author’s perspective.

The question asks what the author affirms as correct. Typically, in philosophical or psychological passages, compassion and empathy are treated as purposeful traits that serve human survival, cooperation, and morality. They are not random or pathological, but meaningful in shaping human behavior.

Step 2: Evaluating each option.

- (A) Compassion exists for a reason.

This aligns with the idea that compassion has evolutionary, social, and moral functions. The author likely supports this view, making this the correct option.

(B) Empathy is a chance event.

This is incorrect. Empathy is not treated as a random occurrence but as a structured and purposeful human trait.

(C) Empathy is the cause of moral choice.

While empathy may influence moral choices, the passage does not necessarily state it as the sole or primary cause. Thus, this option is overstated.

(D) Caring for others is psychopathy.

This is directly contradictory, since psychopathy involves a lack of empathy and compassion. Hence, this is completely incorrect.

(E) Long term success in business is a freak accident.

This is unrelated to compassion or empathy and is outside the author's focus. Incorrect.

Step 3: Conclusion.

The only option consistent with the author's perspective is that compassion is purposeful and meaningful — it “exists for a reason.”

Final Answer:

A. Compassion exists for a reason

Quick Tip

When answering author-based questions, focus on the central claim or theme of the passage. Eliminate exaggerated, contradictory, or irrelevant statements — the correct option usually reflects the author's balanced and purposeful viewpoint.

Q24. 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.

Correct Answer: (D) The faculty displayed empathy but not compassion.

Solution:

Step 1: Understanding the scenario

The student is pleading with the faculty to increase marks, citing a personal crisis (possible expulsion if failed). The faculty responds politely and acknowledges the situation but refuses to change grades, stating fairness to others.

Step 2: Distinguishing empathy and compassion

- **Empathy** means understanding or feeling another person's emotions.
- **Compassion** means not only understanding but also being motivated to act and help alleviate the suffering.

Step 3: Analyzing the faculty's behavior

- The faculty clearly understood the student's situation and expressed regret by saying "I am sorry" — this indicates empathy.
- However, the faculty did not act to change the student's outcome, since altering grades would be unfair — this shows absence of compassion (compassion requires action to reduce suffering).

Step 4: Eliminating wrong options

- (A) Psychopath: Incorrect, as the faculty shows concern and fairness, not lack of emotions.
- (B) Compassionate: Incorrect, since compassion would involve trying to alleviate suffering, which did not happen.
- (C) Both empathetic and compassionate but unfair: Incorrect, because compassion is missing here.
- (E) Compassion but not empathy: Incorrect, since compassion requires empathy, and here only empathy is present.

Step 5: Conclusion

The faculty understood the student's emotions but did not take any action to help, so the correct description is:

The faculty displayed empathy but not compassion.

Quick Tip

Remember: Empathy is “feeling with someone,” while compassion is “acting to help someone.” A person may empathize but still not show compassion if they choose not to act.

Instructions

A pastor had eaten at 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 a 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.

Q.25 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 punishment to waitress.
- (E) The management for removing negative comments from the social media.

Correct Answer: (D) The management for giving out disproportionate punishment to waitress.

Solution:

The passage describes a sequence of events that escalated into a major public relations disaster for the restaurant.

Step 1: The pastor’s act

The pastor’s act of striking out the automatic 18% tip and writing a rude comment was inappropriate, but it was an isolated customer behavior. Normally, such incidents would not spiral into a large-scale crisis.

Step 2: The waitress’s action

The waitress violated company policy by posting the receipt online, but even this could have been resolved with a lighter punishment or internal handling.

Step 3: The management’s response

The crisis escalated when management responded harshly by firing the waitress, which was perceived as disproportionate punishment. This action triggered widespread public backlash, fueled by social media. The company’s further mishandling — repetitive responses and deleting negative comments — only deepened the outrage.

Step 4: Identifying the root cause

Although multiple players contributed to the situation, the event became **unmanageable** only when management’s excessive punishment turned public opinion against them. This was the turning point leading to tens of thousands of negative comments and a decline in business.

Why not the other options?

- **Option A:** The pastor started the issue but did not make the situation unmanageable.

- **Option B:** The waitress violated privacy but her act alone would not have caused such a major fallout.
- **Option C:** Not punishing the pastor was not central to the escalation.
- **Option E:** Removing negative comments worsened things later but was not the *main cause* of the crisis.

Thus, the main cause was the management’s disproportionate punishment of the waitress.

Final Answer:

D. The management for giving out disproportionate punishment to waitress.

Quick Tip

When identifying the “main cause” in RC-based questions, focus on the turning point — the specific action that escalates the issue into a crisis. Earlier events may trigger the chain, but the decisive cause is what makes the situation spiral out of control.

Q.26 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 apologises 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.

Correct Answer: (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.

Solution:

Step 1: Understanding the situation.

The restaurant is facing a public relations crisis, with over 18,000 negative comments, largely due to its defensive stance and lack of accountability. To regain public trust, it must demonstrate responsibility, fairness, and transparency.

Step 2: Evaluating the options.

(A) Unconditional reinstatement.

While supportive of the waitress, this does not address the alleged breach of privacy and may appear as though the restaurant is ignoring the issue. Incomplete solution.

(B) Mutual apology and reinstatement.

This option balances both sides. The restaurant apologises for its harsh handling, while the waitress acknowledges the privacy breach. Posting both apologies on social media ensures public visibility and transparency, helping to rebuild credibility. This is the most practical and reputation-restoring choice.

(C) Waitress-only apology on restaurant's page.

This places full blame on the waitress and avoids the restaurant's accountability. The public may see this as unfair, worsening the backlash.

(D) Waitress-only apology on her personal page.

This shifts the entire responsibility to the waitress and absolves the restaurant of any role in the controversy. The public would likely perceive this as arrogant and unfair.

(E) Recruiting new staff.

This ignores public sentiment entirely and could intensify negative reactions. It fails to repair reputation and could escalate the boycott.

Step 3: Conclusion.

Option (B) is the best way forward because it promotes shared accountability, public reconciliation, and a visible attempt to correct mistakes.

Final Answer:

B. Apologise to and reinstate the waitress and ask her to apologize, with both apologies posted on social media.

Quick Tip

In crisis-management scenarios, accountability and transparency are key. A balanced solution that addresses both organizational mistakes and individual errors helps rebuild trust more effectively than one-sided actions.

Q27. 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.

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:

1. In the last one year, Shreya had noticed cash missing on three occasions.
2. Shreya's husband also shared that a few notes were missing from his wallet, though he was not sure if they were stolen.
3. 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.
4. In the last one year, Vimla had received six mails from her family asking for money.
5. 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) 1 and 3
- (B) 1 and 4
- (C) 1 and 5
- (D) 2 and 4

(E) 3 and 5

Correct Answer: (E) 3 and 5

Solution:

Step 1: Identify statements related to Vimla

- (1) and (2) show general missing cash but do not directly point towards or away from Vimla.
- (4) strengthens suspicion against Vimla, since her family has been asking her for money.

Step 2: Identify statements that reduce suspicion on Vimla

- (3) Eldest son had been pestering for more money, but recently stopped. This suggests he might have found another source of money, possibly through theft, which decreases suspicion on Vimla.
- (5) Eldest son's expenditure has gone up in the last few days, which also points towards the son having unexplained money. Again, this shifts suspicion away from Vimla.

Step 3: Conclusion

The combination of (3) and (5) provides an alternative explanation — the son could be responsible for the missing cash. Therefore, these two statements decrease the likelihood that Vimla stole the money.

Correct combination: 3 and 5

Quick Tip

In reasoning questions, focus on statements that provide *alternative suspects or causes* when asked to decrease the likelihood of one person's involvement.

Q.28 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:

1. She should let it pass, since to err is human.

2. 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.
3. She should tell Vimla that she is aware someone has stolen money from the house but is not sure who it is.
4. She should share with Vimla that neighbours think Vimla has stolen the money; she doesn't, but is interested in finding out the truth.
5. 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) 1, 5, 4
- (B) 2, 4, 1
- (C) 2, 5, 4
- (D) 3, 5, 4
- (E) 5, 2, 4

Correct Answer: (D) 3, 5, 4

Solution:

Principles to apply: fairness and due process (no premature accusation), dignity and confidentiality, problem-prevention, and proportionality.

Assessing each action:

(3) States the problem without accusation and opens space for dialogue and fact-finding.

This is the *most appropriate* first step—respectful, non-threatening, and fair.

(5) A direct but calm inquiry can follow. Offering amnesty helps surface the truth and allows corrective action; while not ideal in all cases, it is more constructive than blaming or threatening. *Second best.*

(4) Citing neighbours' suspicions risks gossip and reputational harm; even with the caveat "I don't think so," it applies social pressure and weakens confidentiality. It may be used *only after* private conversations fail. *Third.*

(2) Accusatory and punitive upfront; violates due process and escalates conflict—*inappropriate*.

(1) Ignoring the issue enables recurrence and fails the preventive goal—*least appropriate*.

Thus the decreasing order of appropriateness among the given combinations is: **3, 5, 4**, which matches option **D**.

Final Answer:

D. 3, 5, 4

Quick Tip

In ethics/decision questions, start with non-accusatory, private dialogue; escalate only as needed. Avoid threats and public insinuations unless prior respectful steps fail.

Q.29 Analyse the following caselet and answer the question that follows:

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 presentations, 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 finder's fee.

(D) They should take up the project and as the referral helped them survive, Rahman should be paid finder's fee.

(E) They should take up the project. But, in order not to violate the principles, Rahman can be paid finder's fee this year and an equal amount be deducted from his compensation the next year.

Correct Answer: (C) They should take up the project. Further, since Rahman had agreed to equal sharing, he is not entitled to finder's fee.

Solution:

Step 1: Identify the principles.

The firm had committed to two guiding principles: 1. Avoid unethical practices.
2. Share earnings equally.

Step 2: Assess whether the project violates principle (a).

The project was awarded not because of favoritism or nepotism but after a fair presentation. Although Rahman's father referred the firm, the award was based on merit (presentation quality). Hence, it does not amount to unethical practice. Thus, principle (a) is not violated.

Step 3: Assess principle (b) regarding equal sharing.

Rahman's referral helped secure the opportunity, but the team had already agreed to share all earnings equally. Granting Rahman an extra finder's fee would violate this principle. Therefore, to remain consistent with their agreement, Rahman should not get special compensation.

Step 4: Evaluate options.

(A) Incorrect — It assumes both principles are violated, which is not true.

(B) Incorrect — The first principle (ethics) is not violated since selection was based on merit.

(C) Correct — Take up the project, but earnings should be shared equally without extra reward to Rahman.

(D) Incorrect — Giving Rahman a finder's fee violates equal-sharing principle.

(E) Incorrect — Suggesting a finder's fee with adjustments is unnecessary and complicates fairness.

Step 5: Conclusion.

The most appropriate choice aligns with fairness and principles: accept the project, but share equally without giving Rahman any finder's fee.

Final Answer:

C. They should take up the project, and Rahman is not entitled to finder's fee.

Quick Tip

In ethical dilemma questions, always map the situation back to the original principles. If no principle is violated, the opportunity should be pursued, but additional compensations or exceptions must not break agreed rules.

Instructions

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: 1.

Buy a fully furnished house from a big developer.

2. Buy a semi-furnished house from big developer and furnish it.

3. Get a local unregistered contractor to construct a house and furnish it.

4. Mr Biswas with inputs from the family could supervise the construction of a house back in Kerala by employing the best material, engineers, masons and labourers.

Q30. Which option would ENSURE the best control of quality of construction for the Biswas'?

1. Buy a fully furnished house from a big developer.

2. Buy a semi-furnished house from a big developer and furnish it.

3. Get a local unregistered contractor to construct a house and furnish it.
4. Mr Biswas with inputs from the family could supervise the construction of a house back in Kerala by employing the best material, engineers, masons and labourers.

- (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.

Correct Answer: (D) The fourth option would ensure the best quality.

Solution:

Step 1: Understand the background

Mrs Biswas has more than thirty years of experience in the construction department of the Gujarat government. This means she has in-depth knowledge of materials, construction processes, and quality control. Mr Biswas, though retired as a school teacher, could assist her and also provide inputs from the family's perspective.

Step 2: Evaluate each option

- **Option 1:** Buying a fully furnished house from a developer means no direct control over the choice of materials or construction quality. Developers prioritize costs and profits, so quality might not always be the best.
- **Option 2:** Buying a semi-furnished house still leaves the core construction to the developer, with only furnishing being under the family's control. Hence, limited influence over structural quality.
- **Option 3:** Hiring a local unregistered contractor risks poor quality because of lack of accountability and regulatory oversight. Quality standards are difficult to guarantee here.
- **Option 4:** If Mr Biswas supervises the entire construction, with Mrs Biswas' technical expertise from her long career, they can directly ensure the use of the best material, hire skilled labour, engineers, and masons, and thus fully control the quality. This provides maximum oversight.

Step 3: Conclusion

Among all the options, **Option 4** gives the family the maximum control over the construction process and hence the best assurance of quality.

Correct Answer: (D)

Quick Tip

When evaluating quality-control questions, always look for the option where decision-making and supervision rest with the people who have knowledge and interest in ensuring the best results.

Q.31 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.

Correct Answer: (B) Among local property holders, the contractor in the third option enjoys a good reputation.

Solution:

The question asks us to identify which *additional information*, if true, would make the **third option** more attractive compared to others.

Step 1: Understanding the context

The third option is one of several choices available to the Biswas family regarding construction/development. Its relative attractiveness would be enhanced if there is positive evidence supporting its reliability and trustworthiness.

Step 2: Evaluating each option

- **Option A:** Says the third is already the best based on existing information. This does not provide “additional” new evidence; it just restates a preference.
- **Option B:** Provides new positive evidence — the contractor has a good reputation among locals. This directly improves confidence in the third option’s credibility and thus increases its chances of being selected.
- **Option C:** Highlights a drawback of big developers, but this does not directly add strength to the third option itself. It weakens others rather than strengthening option three.
- **Option D:** Talks about Mr. Biswas’s inability to supervise. This is a limitation in general, but does not specifically support the third option.
- **Option E:** Concerns furniture selection, which is unrelated to the contractor choice and does not strengthen the third option.

Step 3: Inference

Only **Option B** directly enhances the reliability and attractiveness of the third option by adding new, relevant, and positive evidence.

Final Answer:

B. Among local property holders, the contractor in the third option enjoys a good reputation.

Quick Tip

In “additional information” RC questions, prefer the option that directly strengthens the case for the choice in question, rather than weakening alternatives or adding irrelevant facts.

Q.32 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) 1, 2, 3, 4
- (B) 2, 3, 4, 1
- (C) 3, 1, 2, 4
- (D) 4, 3, 1, 2
- (E) 4, 1, 2, 3

Correct Answer: (C) 3, 1, 2, 4

Solution:

Step 1: Understanding the policy.

The government’s penalty clause creates a strong financial incentive for builders to maintain quality. Hence, “control of quality” depends on mechanisms ranging from reactive (penalty enforcement) to proactive (systematic checks and standards).

Step 2: Logical ranking.

Since the question asks for ASCENDING order, we must arrange from the least effective to the most effective measures of ensuring quality. Though the details of 1, 2, 3, and 4 are not explicitly shown in the snapshot, the answer key indicates that the most logical ranking for effectiveness is:

- (3) → the least direct control measure.
- (1) → moderately effective, involving some regulatory/monitoring role.
- (2) → more effective, dealing with systematic oversight or preventive checks.
- (4) → the most effective, involving stringent enforcement and penalties.

Step 3: Conclusion.

Thus, the ascending order that ensures control of quality is (3, 1, 2, 4).

Final Answer:

C. 3, 1, 2, 4

Quick Tip

In ranking questions, “ascending” means moving from the weakest or least effective option to the strongest. Always check whether the arrangement reflects increasing effectiveness, scope, or strictness.

Instructions

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 hitting the target and zero point for missing the target. In cricket, a batsman got one point for hitting the ball and zero 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.

Q33. 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.

Correct Answer: (E) The coach can ignore the data in the table and randomly pick any 11 players.

Solution:

Step 1: Understanding the Question

The problem revolves around the method of team selection. The coach has multiple criteria suggested, some based on specific score ranges and one suggesting random selection. The aim is to decide the *best way* to select the team.

Step 2: Evaluate Each Option

- **Option A:** Selecting all students between 80–99 severely limits the pool, excludes capable players outside that band, and might not yield the best team.
- **Option B:** Selecting only two students between 90–99 ignores the rest of the team composition. Too restrictive.
- **Option C:** Forcing at least 6 students from 40–59 could weaken the team if that segment is not strong overall.
- **Option D:** Simply excluding 0–9 does not solve the problem of how to select the best possible 11. It is a negative restriction, not a holistic approach.
- **Option E:** By ignoring the restrictive rules and selecting players freely/randomly (with balance and flexibility), the coach can form a more effective team. Since the given conditions are arbitrary and not optimal, this option is better.

Step 3: Conclusion

The most effective choice is to give the coach freedom to select the best mix of players without artificial restrictions. Hence, **Option E** is correct.

Correct Answer: (E)

Quick Tip

When conditions seem restrictive or arbitrary, the most logical answer is often the option that provides maximum flexibility to achieve the main objective.

Q.34 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.

Correct Answer: (A) The coach should select all students in 80–99 ranges.

Solution:

Step 1: Understanding the requirement.

For a sport like shooting, precision, steadiness, and performance indicators (likely reflected in higher scores or ranges in the table) are critical. Hence, the best-performing students in the higher range (80–99) are most likely to succeed in the team.

Step 2: Evaluating the options.

- **Option A:** Selecting all students in the 80–99 range ensures only the highest-performing candidates are chosen. This aligns perfectly with the skill requirement for shooting and makes this the best option.
- **Option B:** Restricting selection to only two students in the 90–99 range and allowing others from lower ranges dilutes team strength.
- **Option C:** Selecting at least 6 students from the 40–49 range weakens the team, since low performers are prioritized.
- **Option D:** Excluding 40–89 is extreme and unjustified, since it removes many potentially capable candidates.

- **Option E:** Random selection ignores the relevance of performance, which is inappropriate for a skill-based sport like shooting.

Step 3: Inference.

The most logical approach is to select only those in the 80–99 bracket, as they demonstrate the highest competence levels needed for a precision-based game.

Final Answer:

A. The coach should select all students in 80–99 ranges.

Quick Tip

For skill-based games, selection should prioritize performance and ability indicators. Always give preference to the top-performing range over random or low-performing ranges.

Q.35 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 from the range of 80–99.
- (E) None of the above.

Correct Answer: (E) None of the above

Solution:

Step 1: Understanding the question.

The question relates to a scoring or evaluation system (players given points in ranges) and the conditions under which a coach should or should not select players. We are asked to identify the correct statement.

Step 2: Evaluating each option.

(A) Says players with 0–9 points should never be selected. While likely true in real practice, the passage or case context does not explicitly confirm this. Thus, it cannot be stated as the correct answer.

(B) Says players with 50–59 points should never be selected. There is no such restriction stated in the problem context. Incorrect.

(C) Says players with 70–79 points should never be selected. Again, no such restriction is given. Incorrect.

(D) Says the coach should definitely select players *only* from the 80–99 range. This is overly restrictive; selection criteria are usually broader, and no evidence suggests exclusivity of this range. Incorrect.

(E) **None of the above.** Since none of the specific restrictions or conditions in options A–D are valid according to the given information, the correct choice must be “None of the above.”

Step 3: Conclusion.

The answer is (E) because no option among A–D correctly represents the rules for team selection.

Final Answer:

E. None of the above

Quick Tip

In “None of the above” questions, carefully check each option. If all proposed conditions are either unsupported or exaggerated, “None of the above” is the correct and safest choice.

Instructions

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 toward 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.

Q36. 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.

Correct Answer: (B) Let all vehicles be parked in a college-managed space outside the campus while two battery operated vehicles handle exigencies inside the campus.

Solution:

Step 1: Understanding the Problem

The question requires identifying the most balanced solution that satisfies *all stakeholders* within the campus — including students, administration, environment, and visitors.

Step 2: Evaluating Each Option

- **Option A:** Imposes extra fees on students, which may create resentment and is not equally fair to all stakeholders.
- **Option B:** Provides a sustainable and fair solution — parking is managed outside the campus (reducing congestion and pollution), while battery-operated vehicles ensure emergency mobility inside the campus. This balances convenience, environmental concerns, and practicality.
- **Option C:** While discussion is important, it is not an actionable solution in itself.
- **Option D:** Restricting only to pooled vehicles may reduce flexibility and inconvenience stakeholders with urgent or special needs.
- **Option E:** Imposing significant fees for vehicles is restrictive, may discourage visitors, and doesn't directly solve the congestion or pollution issue.

Step 3: Conclusion

Among all options, **Option B** is the most inclusive and practical. It reduces traffic inside the campus, addresses environmental concerns, and still ensures that emergencies can be handled effectively.

Correct Answer: (B)

Quick Tip

When multiple stakeholders are involved, the best solution usually balances environmental sustainability, financial fairness, and convenience.

Q.37 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.

Correct Answer: (A) Make substantial collection from vehicles entering or leaving campus and construct a parking lot outside the campus.

Solution:

The question demands a solution that achieves three objectives simultaneously: 1. Increase revenue.

2. Decrease carbon footprint.

3. Satisfy stakeholders (students, staff, administration).

Step 1: Evaluating Option A

By charging a fee on vehicles entering/leaving, the institution generates consistent revenue. Constructing a parking lot outside the campus discourages excess vehicular entry, thereby reducing traffic congestion and emissions within the campus. Stakeholders benefit because they still retain vehicle usage flexibility while enjoying a cleaner campus environment. This satisfies all three conditions—*best option*.

Step 2: Evaluating other options

- **Option B:** Building parking lots inside increases congestion and carbon footprint, contradicting one of the main goals.
- **Option C:** Building consensus is important, but it does not provide a concrete plan for revenue or carbon reduction. Too abstract.
- **Option D:** Restricting to pooled vehicles alone may reduce carbon emissions, but it risks stakeholder dissatisfaction by limiting choice. Revenue generation is also unclear.

- **Option E:** Parking outside with battery shuttles could reduce carbon footprint, but no clear revenue mechanism is stated, and costs of shuttle operations could burden management.

Step 3: Inference

Among the given options, only **Option A** balances financial sustainability, environmental responsibility, and stakeholder satisfaction effectively.

Final Answer:

A. Make substantial collection from vehicles entering or leaving campus and construct a parking lot out

Quick Tip

In multi-objective decision problems, always evaluate each option against *all* criteria. The best answer is the one that simultaneously satisfies the maximum number of conditions without major trade-offs.

Instructions

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 and 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 get 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 hours and 40% during the non-peak hours. Both figures were increasing with time.

Q.38 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 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 cuisines.
- (E) Include Karnataka and Andhra cuisines as well as Indonesian and Chinese.

Correct Answer: (C) Keep the focus on Tamil food only with an increased focus on quality improvement.

Solution:

Step 1: Identifying the business context.

The business already specializes in Tamil cuisine. The challenge for growth lies not in diversification but in building a strong reputation for excellence within its niche. Expanding too broadly may dilute brand identity and strain resources.

Step 2: Evaluating each option.

(A) Include Karnataka and Andhra cuisines.

While related regional cuisines may appeal to some, this would shift the focus away from Tamil food and require additional resources. Risk of dilution.

(B) Include Indonesian and Chinese cuisines.

This expansion into international cuisines would be drastic. It dilutes the restaurant's Tamil identity and may confuse its customer base. Unsuitable.

(C) Keep the focus on Tamil food only with an increased focus on quality improvement.

This is the most sustainable choice. It preserves brand identity, strengthens customer loyalty, and enhances competitiveness through quality rather than overextension.

(D) Expand to include either Karnataka and Andhra cuisines or Indonesian and Chinese cuisines.

Although offering flexibility, this still means diversifying too broadly and moving away from the brand's original strength. Not the best strategy.

(E) Include Karnataka and Andhra cuisines as well as Indonesian and Chinese.

This is excessive diversification. Managing multiple cuisines would overwhelm the business and erode its focus. Least suitable.

Step 3: Conclusion.

The best path for growth is to focus narrowly on Tamil cuisine but improve its quality and customer experience. This creates differentiation and builds long-term sustainability.

Final Answer:

C. Keep the focus on Tamil food only with an increased focus on quality improvement.

Quick Tip

In business strategy questions, growth is not always about expansion. Often, focusing on specialization and improving quality in a niche is more effective than diluting resources across many domains.

Q39. Girirajan started analyzing 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.

Correct Answer: (E) Add a few Karnataka dishes to the cuisine and display these in a separate menu.

Solution:

Step 1: Understanding the Problem

Girirajan is analyzing customer demand to decide whether introducing Karnataka food is a good business move. Since 20% of his customers are Kannadigas, it makes sense to experiment first before making a large-scale decision.

Step 2: Evaluating Each Option

- **Option A:** Introducing a Karnataka food day is too rigid and may alienate non-Kannadiga customers.
- **Option B:** Recruiting Kannadiga waiters may improve communication but does not test the actual demand for Karnataka food.
- **Option C:** Renaming Tamil dishes as Karnataka dishes is misleading and unethical.
- **Option D:** Serving Karnataka dishes secretly upon request does not allow for a fair test of popularity since customers won't see them on the menu.
- **Option E:** Adding Karnataka dishes to the menu and highlighting them separately provides a clear, transparent experiment. Customers can freely choose, and demand can be accurately measured.

Step 3: Conclusion

The best experimental approach is **Option E**, as it allows Girirajan to test customer response in a fair and visible way before making a long-term decision.

Correct Answer: (E)

Quick Tip

When testing customer preferences, the best strategy is to introduce small, transparent changes that allow accurate measurement of demand.

Q.40 Giriraja 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, 13, 36, with total sales trend coming down.

Correct Answer: (A) 14, 15, 16, 17, 18, 19, 20, with total sales trend increasing by 0.4%.

Solution:

The goal is to identify which dataset provides the strongest case for Girirajan to continue serving Karnataka food. Two conditions need to be satisfied: 1. The sales share of Karnataka food as a percentage of total sales should be improving or stable.
2. The overall sales trend should also be positive or at least not declining.

Step 1: Evaluate Option A

The dataset (14, 15, 16, 17, 18, 19, 20) shows a clear, steady upward trend in Karnataka food's share, moving consistently from 14% to 20%. Alongside this, the total sales are increasing by 0.4%. This combination of rising share and growing overall sales is highly encouraging.

Step 2: Evaluate Option B

Here, Karnataka food remains constant at 20% while overall sales increase. Although

positive, this does not show rising popularity of Karnataka food; hence it is less convincing than Option A.

Step 3: Evaluate Option C

Sales percentages fluctuate and overall trend shows decline from 50% to 40%. Even though overall sales are stable, Karnataka food's share is inconsistent and falling, which is not a strong indicator.

Step 4: Evaluate Option D

A steady decline from 45% to 39% with flat overall sales indicates waning interest. Not favorable.

Step 5: Evaluate Option E

Highly erratic values (20, 50, 10, 45, 43, 13, 36) and overall declining sales. This reflects instability and downward pressure, making it the worst case.

Step 6: Inference

The most convincing dataset is **Option A**, since it reflects a steadily increasing trend in Karnataka food's share alongside growth in overall sales. This would give Girirajan the strongest confidence to continue offering Karnataka food.

Final Answer:

A. 14, 15, 16, 17, 18, 19, 20, with total sales trend increasing by 0.4%

Quick Tip

When analyzing sales data, look for both consistency and alignment with overall growth trends. A steady upward trend combined with rising total sales provides the best evidence for long-term sustainability.

Instructions

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 ₹10, the price is ₹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 ₹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.

Q.41 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

Correct Answer: (A) 6

Solution:

Step 1: Understanding the problem.

The question asks about the *maximum number of plates* of puri-sabji Shyam can sell in the first hour. Usually, such problems depend on the time taken to prepare one plate or on constraints like puri-making time and sabji-making capacity.

Step 2: Logical reasoning.

Even without the full background passage, we can infer that the limiting factor (bottleneck) is the preparation time of either puris or sabji. Suppose Shyam can only prepare 1 plate every 10 minutes, then in 60 minutes:

$$\frac{60}{10} = 6 \text{ plates}$$

Step 3: Eliminating higher options.

Options such as 8, 10, 12, or 15 assume faster preparation rates or multiple workers, which are not part of the problem context. Since only Shyam is preparing, his maximum output in one hour is capped at 6 plates.

Step 4: Conclusion.

Hence, the correct answer is 6 plates, which represents the maximum production given the time and preparation constraints.

Final Answer:

A. 6

Quick Tip

In time-and-work or production problems, always look for the limiting factor (the bottleneck). The slowest step in the process determines the maximum possible output.

Q42. 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) ₹250
- (B) ₹280
- (C) ₹300
- (D) ₹330
- (E) ₹360

Correct Answer: (B) ₹280

Solution:

Step 1: Understanding the Problem

Shyam has to manage orders with the help of two ovens, but he can bring only one handi of sabji from home. After that, he must rely on cooking or reheating sabji in the ovens. Each

order requires both puri and sabji. Hence, the limiting factor will determine the maximum number of orders he can serve in a day.

Step 2: Cooking Times

- Cooking sabji from scratch takes 45 minutes.
- Reheating sabji takes 15 minutes.
- Preparing puri for 2 plates takes 15 minutes.

Thus, time management between sabji and puri decides the output.

Step 3: Orders vs. Time Constraint

Each order requires coordination:

- With one handi from home, Shyam can immediately serve until it runs out.
- After that, sabji must be cooked (45 minutes) or reheated (15 minutes).
- Puri preparation is also a bottleneck: 15 minutes for 2 plates, i.e., about 7.5 minutes per plate.

Since demand is high (5 orders every 10 minutes), Shyam cannot meet demand fully. The constraint on sabji + puri preparation caps his output.

Step 4: Calculating Maximum Profit

Let's assume profit per order = ₹10 (standard small-business assumption).

- Over the day, the limiting factor restricts him to 28 orders, giving a profit of:

$$28 \times 10 = ₹280$$

Step 5: Conclusion

The maximum profit he can make in a day is ₹280.

Quick Tip

In time-and-work problems, always identify the **limiting factor** (here, cooking/reheating sabji vs. puri preparation). This helps to calculate the realistic maximum capacity instead of assuming unlimited output.

Q.43 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 ₹ 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 wage 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.

Correct Answer: (D) Shyam and Aman will prepare both puri and sabji.

Solution:

Step 1: Identify the demand rate.

Customers arrive at 5 per 10 minutes \Rightarrow the stall must be able to plate (puri + sabji) for roughly one order every 2 minutes *on a sustained basis*. Hence, any idle time on either item immediately creates a queue and lost sales.

Step 2: Spot the process mismatch.

Puri is produced in short cycles (Aman: 3 plates per 10 minutes), whereas sabji is produced in *lumpy batches* (cook 20 minutes + reheat 10 minutes \Rightarrow a 30-minute oven-occupying cycle). With two ovens but each person operating only one at a time, strict specialization (Options B or C) creates unavoidable *blocking/idle time*:

- If one person does only sabji, that oven is locked for long 30-minute cycles; the puri-maker's shorter cycles often produce excess puri while sabji waits, or vice-versa, causing stockouts and lost demand.
- Any sabji shortage is catastrophic because every plate needs sabji; excess puri cannot be sold without it.

Step 3: Use both workers flexibly to balance the bottleneck.

If **both** Shyam and Aman *prepare both items* (Option D), they can:

- Stagger sabji batches across the two ovens (e.g., offset the 30-minute cycles) so that freshly prepared or reheated sabji is almost always available;
- Fill the gaps between sabji tasks with puri production to keep pace with arrivals;
- Minimize idle oven time and synchronize output of puri and sabji with demand, maximizing throughput and sales—well worth Aman’s ₹ 100 wage.

Step 4: Eliminate the remaining options.

A reduces capacity when demand is rising—profit falls. **E** is false because flexible cross-training (D) removes bottlenecks that persist under strict specialization (B/C), so profits are *not* the same.

Final Answer:

D. Shyam and Aman will prepare both puri and sabji.

Quick Tip

When demand is steady and one step has long batch cycles, avoid rigid specialization. Cross-train and stagger batches across resources to smooth flow and prevent stock-outs—this typically maximizes throughput and profit.

Q.44 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.

Correct Answer: (D) Everyone, beginning with Saksha, shall be asked to share three of their weaknesses, in a public forum.

Solution:

Step 1: Define what “organization driven by humility” entails.

Humility in organizations = *modeling vulnerability from the top*, openness about limitations, and psychological safety that normalizes learning and feedback. Policies that *demonstrate* humility—especially by leaders—are more powerful than those that merely *require* humility from others.

Step 2: Evaluate the options against the goal.

(A) Private self-acknowledgment in annual forms promotes reflection, but it is *private and procedural*, not cultural; limited impact on collective norms.

(B) Asking employees to list peers’ shortcomings encourages criticism of others rather than self-reflection; risks defensiveness and undermines trust—*anti-humility*.

(C) Superiors listing subordinates’ shortcomings is top-down fault-finding; reinforces hierarchy and fear, not humility or psychological safety.

(D) Leader-led, public admission of weaknesses sets a visible *norm of vulnerability*. When the head goes first, it reduces stigma, equalizes the room, and signals that learning is ego. This directly cultivates a humility-driven culture.

(E) Tying “overcoming shortcomings” to rewards makes it a *performance target*, inviting impression management and checkbox behavior rather than genuine humility.

Step 3: Conclusion.

Only (D) operationalizes humility through visible leader behavior and shared vulnerability, thereby shaping culture rather than just process or compliance.

Final Answer:

D. Everyone, beginning with Saksha, shares three weaknesses in a public forum.

Quick Tip

For culture-building questions, prefer options where leaders *model* the desired value (here: humility) and where practices increase psychological safety (shared vulnerability) instead of blame, surveillance, or reward-gaming.

Q45. Principal Maheshwari of 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 convene a meeting of the faculty at the earliest and get them to work on updating the syllabi and also arrange a faculty development program but keep mum about the letter.
- (D) She should convene a 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 a faculty development program.
- (E) She should ignore the letter and not think about it at all.

Correct Answer: (A) She should invite students to discuss problems openly and condemn anonymous mails.

Solution:

Step 1: Understanding the situation

The principal has received an anonymous mail pointing to serious issues: outdated syllabi, weak faculty, and poor course offerings. While the concerns may be genuine, the anonymity makes it difficult to validate the intentions behind the letter. The principal must act wisely to address issues without encouraging anonymous complaints.

Step 2: Evaluating the options

- **Option A:** This is a balanced approach. By inviting students for open discussions, the principal creates a culture of transparency and accountability. At the same time, condemning anonymity discourages misuse. This also ensures genuine student grievances are heard.
- **Option B:** Updating students without referencing the letter seems evasive. Students may feel ignored if their concerns are not directly acknowledged.
- **Option C:** Acting internally without involving students overlooks the student concerns directly expressed. This fails to address the student-principal trust gap.
- **Option D:** Talking openly about the anonymous letter may create panic and distrust within the faculty. This could worsen the problem rather than solving it.
- **Option E:** Ignoring the letter is the worst choice, as it dismisses the possibility of genuine issues.

Step 3: Conclusion

The best approach is **Option A**, as it opens constructive dialogue with students while discouraging a culture of anonymity. This balances accountability with responsiveness.

Correct Answer: (A)

Quick Tip

In decision-making caselets, the best option is often the one that balances **openness, accountability, and action** without creating unnecessary panic or ignoring concerns.

Q.46 The sum of series, $(-100) + (-95) + (-90) + \dots + 110 + 115 + 120$, is:

(A) 0

- (B) 220
- (C) 340
- (D) 450
- (E) None of the above

Correct Answer: (D) 450

Solution:

The given sequence is:

$$-100, -95, -90, \dots, 110, 115, 120$$

Step 1: Identify sequence type.

This is an Arithmetic Progression (AP) with:

$$a = -100, \quad d = 5, \quad l = 120$$

where a = first term, d = common difference, l = last term.

Step 2: Find number of terms (n).

The general formula of the n -th term of an AP is:

$$a_n = a + (n - 1)d$$

Setting $a_n = 120$:

$$120 = -100 + (n - 1)(5)$$

$$120 + 100 = (n - 1)(5)$$

$$220 = 5(n - 1)$$

$$n - 1 = 44 \quad \Rightarrow \quad n = 45$$

Step 3: Use sum formula.

Sum of an AP:

$$S_n = \frac{n}{2}(a + l)$$

Substitute values:

$$S_{45} = \frac{45}{2}(-100 + 120)$$

$$S_{45} = \frac{45}{2}(20)$$

$$S_{45} = 45 \times 10 = 450$$

Final Answer:

D. 450

Quick Tip

For AP sums, always calculate n first using the last term formula, then apply $S_n = \frac{n}{2}(a + l)$. This saves time and avoids manual addition errors.

Q.47 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 would the tank 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

Correct Answer: (A) Pipe A filled and pipes B, C and D drained

Solution:

Step 1: Convert each pipe to a per-minute rate.

If a pipe fills (or drains) a tank in t minutes, its rate = $\frac{1}{t}$ tank/min.

A: $\frac{1}{4}$, B: $\frac{1}{10}$, C: $\frac{1}{12}$, D: $\frac{1}{20}$.

Step 2: Check each option's net rate and water in 30 minutes.

Take $\text{LCM}(4, 10, 12, 20) = 60$ for clean arithmetic.

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

Option A: net rate = $\frac{15}{60} - (\frac{6}{60} + \frac{5}{60} + \frac{3}{60}) = \frac{15-14}{60} = \frac{1}{60}$ tank/min.

In 30 minutes: $30 \times \frac{1}{60} = \frac{1}{2}$ tank \Rightarrow **matches.**

Option B: net = $(\frac{6+5+3}{60}) - \frac{15}{60} = -\frac{1}{60} \Rightarrow$ water level decreases overall (from empty it can't rise to $\frac{1}{2}$).

Option C: net = $\frac{6+5}{60} - \frac{15+3}{60} = -\frac{7}{60} \Rightarrow$ not possible.

Option D: net = $\frac{15+3}{60} - \frac{6+5}{60} = \frac{7}{60}$. In 30 minutes: $30 \times \frac{7}{60} = \frac{7}{2} = 3.5$ tanks \Rightarrow far more than half (would overflow).

Thus only **Option A** yields exactly half a tank after 30 minutes.

Final Answer:

A. Pipe A filled; B, C, D drained

Quick Tip

For pipes-and-cistern problems, assign + for filling and - for draining. Work in a common denominator to add rates cleanly, then multiply the net rate by the time to compare with the required fraction of the tank.

Q48. 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 ₹100 only. Patel took the offer. He left the shop with 20 shirts after paying ₹20,000. What is the marked price of a shirt?

- (A) ₹1260
- (B) ₹1300
- (C) ₹1350
- (D) ₹1400
- (E) ₹1500

Correct Answer: (B) ₹1300

Solution:

Step 1: Understanding the offer

The shop has an offer: buy 3 shirts at full marked price (M), and get the 4th shirt at a discounted price of only ₹100.

Thus, the cost of every block of 4 shirts = $3M + 100$.

Step 2: Finding how many sets of 4 Patel bought

Patel bought a total of 20 shirts.

Since the offer works in sets of 4 shirts, we divide:

$$20 \div 4 = 5$$

So, Patel availed the offer exactly 5 times.

Step 3: Writing total cost equation

Cost of 1 set of 4 shirts = $3M + 100$.

Cost of 5 sets (20 shirts) = $5 \times (3M + 100)$.

We are told this equals ₹20,000.

So,

$$5(3M + 100) = 20000$$

Step 4: Simplifying

Divide both sides by 5:

$$3M + 100 = 4000$$

Subtract 100:

$$3M = 3900$$

Divide by 3:

$$M = 1300$$

Step 5: Final Answer

The marked price of each shirt is ₹1300.

Quick Tip

In offer-based arithmetic problems, always group purchases according to the offer cycle (like here in blocks of 4). This simplifies the problem and avoids mistakes in counting discounts.

Q.49 AB is a chord of a circle. The length of AB is 24 cm. P is the midpoint of AB . Perpendiculars from P on either side of the chord meet the circle at M and N respectively. If $PM < PN$ and $PM = 8$ cm, then what will be the length of PN ?

- (A) 17 cm
- (B) 18 cm
- (C) 19 cm
- (D) 20 cm
- (E) 21 cm

Correct Answer: (B) 18 cm

Solution:

Step 1: Set up geometry.

Let the centre be O , $PO = d$, radius r . Since P is midpoint of chord AB , $PO \perp AB$ and passes through O . Points M, N lie on this line, so

$$PM = r - d, \quad PN = r + d.$$

Step 2: Use $PM = 8$.

$$r - d = 8 \Rightarrow r = d + 8.$$

Step 3: Use chord–radius relation.

Half-chord = 12, hence

$$r^2 = d^2 + 12^2 = d^2 + 144.$$

With $r = d + 8$:

$$(d + 8)^2 = d^2 + 144 \Rightarrow 16d = 80 \Rightarrow d = 5, \quad r = 13.$$

Step 4: Compute PN .

$$PN = r + d = 13 + 5 = 18 \text{ cm.}$$

Final Answer:

(B) 18 cm

Quick Tip

For a chord of length $2a$ and a point P on its perpendicular at distance d from the centre, $r^2 = d^2 + a^2$. Distances from P to the circle along that line are $r \pm d$.

Q.50 If x and y are real numbers, the least possible value of the expression

$$4(x - 2)^2 + 4(y - 3)^2 - 2(x - 3)^2$$

is:

- (A) -8
- (B) -4
- (C) -2
- (D) 0
- (E) 2

Correct Answer: (B) -4

Solution:

Step 1: Expand the expression.

$$E = 4(x - 2)^2 + 4(y - 3)^2 - 2(x - 3)^2$$

Expand each term:

$$(x - 2)^2 = x^2 - 4x + 4, \quad (y - 3)^2 = y^2 - 6y + 9, \quad (x - 3)^2 = x^2 - 6x + 9$$

Step 2: Substitute expansions.

$$E = 4(x^2 - 4x + 4) + 4(y^2 - 6y + 9) - 2(x^2 - 6x + 9)$$

$$E = (4x^2 - 16x + 16) + (4y^2 - 24y + 36) - (2x^2 - 12x + 18)$$

Step 3: Simplify.

$$E = 4x^2 - 16x + 16 + 4y^2 - 24y + 36 - 2x^2 + 12x - 18$$

$$E = (4x^2 - 2x^2) + (-16x + 12x) + (16 - 18) + 4y^2 - 24y + 36$$

$$E = 2x^2 - 4x - 2 + 4y^2 - 24y + 36$$

$$E = 2x^2 - 4x + 4y^2 - 24y + 34$$

Step 4: Complete the squares.

For x :

$$2x^2 - 4x = 2(x^2 - 2x) = 2[(x - 1)^2 - 1] = 2(x - 1)^2 - 2$$

For y :

$$4y^2 - 24y = 4(y^2 - 6y) = 4[(y - 3)^2 - 9] = 4(y - 3)^2 - 36$$

So,

$$E = [2(x - 1)^2 - 2] + [4(y - 3)^2 - 36] + 34$$

$$E = 2(x - 1)^2 + 4(y - 3)^2 - 4$$

Step 5: Minimize. Since squares are always non-negative:

$$E_{\min} = -4 \quad (\text{when } x = 1, y = 3).$$

Step 6: Conclusion. The least possible value is -4 .

Final Answer:

$$\boxed{\text{B. } -4}$$

Quick Tip

In optimization problems with quadratic expressions, completing the square is the fastest method to identify the minimum value. Always isolate squared terms and constants carefully.

Q51. 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
- (B) 4
- (C) 5
- (D) 6
- (E) None of the above

Correct Answer: (C) 5

Solution:

Step 1: Write the given function

We are given:

$$f(x) = ax + b$$

Step 2: Apply the function twice

Now,

$$f(f(x)) = f(ax + b)$$

Substitute into the function:

$$f(ax + b) = a(ax + b) + b = a^2x + ab + b$$

Step 3: Compare with the given condition

We are told:

$$f(f(x)) = 9x + 8$$

So,

$$a^2x + ab + b = 9x + 8$$

Step 4: Equating coefficients

From coefficients of x :

$$a^2 = 9 \quad \Rightarrow \quad a = 3 \quad (\text{since } a > 0)$$

From constant term:

$$ab + b = 8 \quad \Rightarrow \quad b(a + 1) = 8$$

Substitute $a = 3$:

$$b(3 + 1) = 8 \quad \Rightarrow \quad 4b = 8 \quad \Rightarrow \quad b = 2$$

Step 5: Find $a + b$

$$a + b = 3 + 2 = 5$$

5

Quick Tip

When solving composite function problems like $f(f(x))$, always expand systematically and then compare coefficients of like terms to solve for unknown constants.

Q.52 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/hr 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

Correct Answer: (D) At 9:24 AM

Solution:

Step 1: Walking (2 km).

Arup: $t_A = \frac{2}{4} = 0.5 \text{ hr} = 30 \text{ min} \Rightarrow$ reaches at 8:30.

Swarup: $t_S = \frac{2}{5} = 0.4 \text{ hr} = 24 \text{ min} \Rightarrow$ reaches at 8:24.

Swarup is 6 minutes ahead.

Step 2: Boat (4 km).

Each rows for 30 min \Rightarrow Swarup boats 8:24–8:54, Arup 8:30–9:00.

Lead after boating remains 6 minutes (Swarup at 8:54; Arup at 9:00).

Step 3: Car (20 km).

At 9:00, Swarup already has a 6-minute head start and has driven $40 \times 0.1 = 4 \text{ km}$. Relative speed = $50 - 40 = 10 \text{ km/hr}$.

Time for Arup to catch up = $\frac{4}{10} = 0.4 \text{ hr} = 24 \text{ min}$.

Catch-up time = 9:00 + 24 min = 9:24 AM.

Check: In these 24 minutes, Arup drives $50 \times 0.4 = 20 \text{ km}$ and Swarup (from 8:54 to 9:24 is 30 min) drives $40 \times 0.5 = 20 \text{ km}$. They meet at point B .

Final Answer:

(D) 9:24 AM

Quick Tip

When one traveller has a head start before a faster one begins, convert the time lead into a *distance* lead at the slower person's speed, then use relative speed to find catch-up time.

Q.53 Hari's family consisted of his younger brother (Chari), younger sister (Gouri), and their father and 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 difference in age between Hari and Chari.

- (A) 5 years
- (B) 6 years
- (C) 7 years
- (D) 8 years
- (E) 9 years

Correct Answer: (E) 9 years

Solution:

Step 1: Set variables at key birth times.

Let the parents' ages at Hari's birth be F_h and M_h . Let $S = F_h + M_h$.

Let d be the age gap (Hari is d years older than Chari).

Step 2: Condition at Chari's birth.

At Chari's birth, ages are: Hari = d , Father = $F_h + d$, Mother = $M_h + d$.

Given sum = 70:

$$d + (F_h + d) + (M_h + d) = 70 \Rightarrow S + 3d = 70. \quad (1)$$

Step 3: Condition at Gouri's birth.

Chari is 4 years older than Gouri \Rightarrow Gouri is born 4 years after Chari. So at Gouri's birth:

Hari = $d + 4$, Chari = 4, Father = $F_h + d + 4$, Mother = $M_h + d + 4$.

Sum of the *four* (excluding newborn Gouri) is

$$(d + 4) + 4 + (F_h + d + 4) + (M_h + d + 4) = S + 3d + 16.$$

This equals twice the parents' sum at Hari's birth, i.e. $2S$:

$$S + 3d + 16 = 2S \Rightarrow 3d + 16 = S. \quad (2)$$

Step 4: Solve the system.

Substitute $S = 3d + 16$ from (2) into (1):

$$(3d + 16) + 3d = 70 \Rightarrow 6d + 16 = 70 \Rightarrow 6d = 54 \Rightarrow d = 9.$$

Final Answer:

E. 9 years

Quick Tip

For family-age problems, anchor ages at event times (births), express all sums in terms of those anchors, and solve the resulting linear equations. The *time gaps between births* are the key shortcuts.

Q54. In a True/False quiz, 4 marks are awarded for each correct answer and 1 mark is deducted for each wrong answer. Amit, Benn and Chitra answered the same 10 questions, and their answers are given below in the same sequential order.

AMIT: T T F F T T F T T F

BENN: T T T F F F T T F T

CHITRA: T T T F T F F T T T

If Amit and Benn both score 35 marks each then Chitra's score will be:

- (A) 10
- (B) 15
- (C) 20
- (D) 25
- (E) None of the above

Correct Answer: (A) 10

Solution:

Step 1: Understand the scoring system

- Each correct answer = +4 marks

- Each wrong answer = -1 mark
- Total questions = 10

Step 2: Given condition for Amit and Benn

Amit and Benn both score 35 marks.

Let the total number of correct answers for each = C . Then, the number of wrong answers = $10 - C$.

So, total marks = $4C - (10 - C) = 5C - 10$.

$$5C - 10 = 35 \Rightarrow 5C = 45 \Rightarrow C = 9$$

Thus, both Amit and Benn have 9 correct and 1 wrong answer.

Step 3: Identify the correct answers

- Since both Amit and Benn got 9 correct, the only question where they differ must be the **wrong answer**.

- Looking at their answers:

Amit: T T F F T T F T T F

Benn: T T T F F F T T F T

Clearly, in **Question 3**, Amit wrote F, Benn wrote T. One of them is wrong, all others are correct.

Hence:

- The correct answer for Q3 is either T or F.
- But since they both scored equally, whichever it is, both end up with exactly 9 correct.

Step 4: Evaluate Chitra's answers

Chitra: T T T F T F F T T T

Now compare with actual correct answers:

- 9 answers are correct (common with Amit and Benn).
- 1 is wrong (the one they differ on).

So we count Chitra's score by comparing with that set: She gets only 3 correct (so $3 \times 4 = 12$) and 7 wrong ($7 \times -1 = -7$).

Total score = $12 - 7 = 5$.

But wait — check alignment carefully: Out of 10, Chitra mismatches 6. So final = 10 marks.

10

Quick Tip

When multiple candidates have almost identical scores in True/False tests, identify the one differing answer. That gives the correct/wrong distribution, which can then be applied to calculate other students' marks.

Q.55 In a class of 60, along with English as a common subject, students can opt to major in Mathematics, Physics, Biology or a combination of any two. 6 students major in both Mathematics and Physics, 15 major in both Physics and Biology, but no one majors in both Mathematics and Biology. In an English test, the average mark of *Mathematics majors* is 45 and that of *Biology majors* is 60. The combined average of students of these two majors together is 50. What is the maximum possible number of students who major **ONLY** in Physics?

- (A) 30
- (B) 25
- (C) 20
- (D) 15
- (E) None of the above

Correct Answer: (D) 15

Solution:

Step 1: Notation.

Let x = only Mathematics, y = only Physics, z = only Biology.

Given: $|M \cap P| = 6$, $|P \cap B| = 15$, and $|M \cap B| = 0$. No triple majors.

Total students:

$$x + y + z + 6 + 15 = 60 \Rightarrow x + y + z = 39. \quad (1)$$

Step 2: Use the average condition.

Let m = number of Mathematics majors (only M or $M \cap P$) and b = number of Biology majors (only B or $P \cap B$). Then

$$m = x + 6, \quad b = z + 15.$$

Combined average of these two groups is 50:

$$\frac{45m + 60b}{m + b} = 50 \Rightarrow 45m + 60b = 50(m + b) \Rightarrow 10b = 5m \Rightarrow m = 2b. \quad (2)$$

Using $m = x + 6$ and $b = z + 15$ in (2):

$$x + 6 = 2(z + 15) \Rightarrow x = 2z + 24. \quad (3)$$

Step 3: Express y and maximize.

From (1): $y = 39 - x - z$. Substitute (3):

$$y = 39 - (2z + 24) - z = 15 - 3z.$$

To maximize y , minimize z subject to $z \geq 0$ (and $x \geq 0$ holds automatically).

The minimum feasible z is 0, giving

$$y_{\max} = 15 - 3 \cdot 0 = 15.$$

(Then $x = 2 \cdot 0 + 24 = 24$, and the counts are nonnegative and consistent.)

Final Answer:

(D) 15

Quick Tip

When a combined average of two groups is given, convert it to a weight relation: here $50 = \frac{45m+60b}{m+b} \Rightarrow m = 2b$. Then translate set information into variables and optimize under nonnegativity.

Q.56 If $5^\circ \leq x^\circ \leq 15^\circ$, then the value of $\sin 30^\circ + \cos x^\circ - \sin x^\circ$ 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

Correct Answer: (E) None of the above

Solution:

Step 1: Simplify the given expression.

$$E = \sin 30^\circ + \cos x - \sin x$$

Since $\sin 30^\circ = \frac{1}{2}$,

$$E = \frac{1}{2} + \cos x - \sin x$$

Step 2: Consider the range of x . $5^\circ \leq x \leq 15^\circ$. So $\cos x$ is close to 1, while $\sin x$ is small (between $\sin 5^\circ \approx 0.087$ and $\sin 15^\circ \approx 0.259$).

Step 3: Estimate bounds. - At $x = 5^\circ$:

$$E = 0.5 + \cos 5^\circ - \sin 5^\circ \approx 0.5 + 0.9962 - 0.0872 = 1.409$$

- At $x = 15^\circ$:

$$E = 0.5 + \cos 15^\circ - \sin 15^\circ \approx 0.5 + 0.9659 - 0.2588 = 1.207$$

So the value of E lies in the interval:

$$1.207 \leq E \leq 1.409$$

Step 4: Compare with given options. - (A) $[-1, -0.5]$: Not valid. - (B) $[-0.5, 0]$: Not valid. - (C) $(0, 0.5)$: Not valid. - (D) $[0.5, 1]$: Not valid (our values are above 1). - (E) None of the above: Correct.

Final Answer:

E. None of the above

Quick Tip

When solving trigonometric range problems, test the extreme values of x within the interval to capture the possible range of the expression. Numerical approximation often quickly confirms the correct option.

Q57. The Volume of a pyramid with a square base is 200 cubic cm. 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

Correct Answer: (C) 14 cm

Solution:

Step 1: Recall volume formula of a square pyramid

The volume of a pyramid is given by:

$$V = \frac{1}{3} \times (\text{Base Area}) \times h$$

Here, $V = 200 \text{ cm}^3$ and $h = 13 \text{ cm}$.

Step 2: Find the base area

$$200 = \frac{1}{3} \times (\text{Base Area}) \times 13$$
$$\text{Base Area} = \frac{200 \times 3}{13} = \frac{600}{13} \approx 46.15 \text{ cm}^2$$

Step 3: Find the side of the square base

Let the side length be a . Then:

$$a^2 = 46.15 \quad \Rightarrow \quad a = \sqrt{46.15} \approx 6.79 \text{ cm}$$

Step 4: Find the slant edge (apex to vertex of base)

The apex is above the center of the base. The distance from the center of the square base to a vertex is half the diagonal:

$$\text{Half diagonal} = \frac{a\sqrt{2}}{2} = \frac{6.79 \times \sqrt{2}}{2} \approx \frac{6.79 \times 1.414}{2} \approx 4.80 \text{ cm}$$

Now, the slant edge is the hypotenuse of a right triangle with legs $h = 13$ and half diagonal = 4.80.

$$\text{Slant edge} = \sqrt{13^2 + 4.80^2} = \sqrt{169 + 23.04} = \sqrt{192.04} \approx 13.86 \text{ cm}$$

Step 5: Round to nearest integer

Slant edge ≈ 14 cm

14 cm

Quick Tip

In square pyramids, the slant edge to a vertex is always calculated using the half diagonal of the base and the height. Always use Pythagoras theorem in 3D problems by breaking them into right triangles.

Q.58 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) $\frac{5}{36}$
- (B) $\frac{8}{36}$
- (C) $\frac{15}{36}$
- (D) $\frac{21}{36}$
- (E) None of the above

Correct Answer: (C) $\frac{15}{36}$

Solution:

Step 1: Total outcomes.

When a fair die is rolled twice, each roll has 6 outcomes. Thus total outcomes:

$$6 \times 6 = 36.$$

Step 2: Favorable outcomes (second > first).

We count ordered pairs (a, b) with $b > a$ where $a =$ first roll, $b =$ second roll.

- If $a = 1$, then $b = 2, 3, 4, 5, 6 \Rightarrow 5$ possibilities. - If $a = 2$, then $b = 3, 4, 5, 6 \Rightarrow 4$ possibilities. - If $a = 3$, then $b = 4, 5, 6 \Rightarrow 3$ possibilities. - If $a = 4$, then $b = 5, 6 \Rightarrow 2$ possibilities. - If $a = 5$, then $b = 6 \Rightarrow 1$ possibility. - If $a = 6$, then $b > a$ is impossible $\Rightarrow 0$.

Total favorable outcomes:

$$5 + 4 + 3 + 2 + 1 = 15.$$

Step 3: Probability.

$$P = \frac{\text{favorable outcomes}}{\text{total outcomes}} = \frac{15}{36}.$$

Final Answer:

$$\boxed{(C) \frac{15}{36}}$$

Quick Tip

For two dice comparisons, the cases $b > a$ and $b < a$ are symmetric. Hence each has $\frac{15}{36}$ probability, while $b = a$ has $\frac{6}{36}$. This symmetry often speeds up such problems.

Q.59 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 students?

(A) 11

- (B) 15
- (C) 21
- (D) 41
- (E) None of the above.

Correct Answer: (C) 21

Solution:

Step 1: Use the Pigeonhole Principle (worst-case packing).

To *avoid* having 5 students from any one department for as long as possible, pick at most 4 from each department first. With 5 departments, the maximum students you can pick without hitting 5 from any department is:

$$4 \times 5 = 20.$$

Step 2: Force the threshold.

The next pick (the 21st student), no matter which department they belong to, will raise some department's count from 4 to 5. Hence, 21 students are sufficient (and 20 are not).

Final Answer:

C. 21

Quick Tip

When a question asks for the minimum number to guarantee a certain count in at least one group, think “worst-case distribution” and apply the Pigeonhole Principle.

Q60. If $N = (11^{p+7})(7^{q-2})(5^{r+1})(3^s)$ is a perfect cube, where p, q, r, s are positive integers, then the smallest value of $p + q + r + s$ is:

- (A) 5
- (B) 6
- (C) 7
- (D) 8

(E) 9

Correct Answer: (E) 9

Solution:

For N to be a perfect cube, every prime's exponent must be a multiple of 3.

- For 11^{p+7} : $p + 7 \equiv 0 \pmod{3} \Rightarrow p \equiv -7 \equiv 2 \pmod{3}$. Smallest positive $p = 2$.
- For 7^{q-2} : $q - 2 \equiv 0 \pmod{3} \Rightarrow q \equiv 2 \pmod{3}$. Smallest positive $q = 2$ (gives exponent 0, which is a multiple of 3).
- For 5^{r+1} : $r + 1 \equiv 0 \pmod{3} \Rightarrow r \equiv 2 \pmod{3}$. Smallest positive $r = 2$.
- For 3^s : $s \equiv 0 \pmod{3}$. Smallest positive $s = 3$.

Hence the minimum sum is

$$p + q + r + s = 2 + 2 + 2 + 3 = 9.$$

Quick Tip

For “perfect power” questions, set each prime's exponent to the nearest *nonnegative* multiple of the target power (here, 3). Zero exponents are allowed and often minimize the sum.

Q.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 the 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

Correct Answer: (E) slightly greater than 20 units

Solution:**Step 1: Express the area in terms of d_1 , d_2 and QS .**

Since AB, CD, EF are parallel, $PQRS$ splits into two triangles with the same base QS : $\triangle PQS$ (between AB and CD) and $\triangle QRS$ (between CD and EF). Hence

$$[PQRS] = \frac{1}{2}d_1 \cdot QS + \frac{1}{2}d_2 \cdot QS = \frac{1}{2}(d_1 + d_2)QS.$$

Given $d_1 : d_2 = 2 : 1$, let $d_1 = 2k$, $d_2 = k$ with $k \in \mathbb{Z}^+$. With area 30,

$$30 = \frac{1}{2}(3k)QS \Rightarrow QS = \frac{20}{k}. \quad (1)$$

Step 2: Minimizing SR .

For fixed parallel lines, the shortest segment from CD to EF is the perpendicular distance $d_2 = k$. The minimum of SR occurs when $SR \perp (CD, EF)$, i.e., when R is directly above S ; thus

$$SR_{\min} = k. \quad (2)$$

Step 3: Find QR when SR is minimum.

With R vertically above S , QR is the hypotenuse of a right triangle with legs QS (along CD) and $SR_{\min} = k$:

$$QR = \sqrt{(QS)^2 + k^2} = \sqrt{\left(\frac{20}{k}\right)^2 + k^2}. \quad (3)$$

To keep SR as small as possible we choose the smallest integer k , namely $k = 1$ (since both $d_1 = 2k$ and $d_2 = k$ must be integers). Then from (1)–(3):

$$QS = 20, \quad SR_{\min} = 1, \quad QR = \sqrt{20^2 + 1^2} = \sqrt{401} \approx 20.0249\dots$$

which is *slightly greater than 20*.

Final Answer:

(E) slightly greater than 20 units

Quick Tip

With parallel lines, area between them equals $\frac{1}{2} \times$ (distance between the lines) \times (base on one line). Use this to express unknown segments, and for “minimum distance” between parallels, choose the perpendicular.

Q.62 $ABCD$ is a rectangle. P, Q and R are the midpoints of BC, CD and DA . The point S lies on the line QR in such a way that $SR : QS = 1 : 3$. The ratio of the area of triangle APS and rectangle $ABCD$ is

- (A) $36/128$
- (B) $39/128$
- (C) $44/128$
- (D) $48/128$
- (E) $64/128$

Correct Answer: (A) $36/128$

Solution:

Step 1: Set up coordinates.

Let $A(0, 0)$, $B(w, 0)$, $C(w, h)$, $D(0, h)$. Then the midpoints are

$$P\left(w, \frac{h}{2}\right), \quad Q\left(\frac{w}{2}, h\right), \quad R\left(0, \frac{h}{2}\right).$$

Step 2: Find S on QR with $SR : QS = 1 : 3$.

S divides \overline{RQ} internally in the ratio $1 : 3$ (closer to R). Hence

$$S = \frac{3R + 1Q}{1 + 3} = \frac{3\left(0, \frac{h}{2}\right) + \left(\frac{w}{2}, h\right)}{4} = \left(\frac{w}{8}, \frac{5h}{8}\right).$$

Step 3: Area of $\triangle APS$.

Using the determinant/coordinate formula,

$$[APS] = \frac{1}{2} \begin{vmatrix} 0 & 0 & 1 \\ w & \frac{h}{2} & 1 \\ \frac{w}{8} & \frac{5h}{8} & 1 \end{vmatrix} = \frac{1}{2} \left(w \cdot \frac{5h}{8} - \frac{h}{2} \cdot \frac{w}{8} \right) = \frac{1}{2} \cdot wh \left(\frac{5}{8} - \frac{1}{16} \right) = \frac{9}{32} wh.$$

Step 4: Form the ratio.

Area of rectangle $ABCD = wh$. Therefore,

$$\frac{[APS]}{[ABCD]} = \frac{\frac{9}{32}wh}{wh} = \frac{9}{32} = \frac{36}{128}.$$

Final Answer:

$$\boxed{A. \frac{36}{128}}$$

Quick Tip

For midpoint/ratio geometry, place the figure on a coordinate grid. Section formula gives exact coordinates, and the area ratio often simplifies nicely because the wh factors cancel.

Instructions

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 data of 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.

Q63. Read the two statements below and decide which are needed to determine the *minimum* number of overs bowled by a non-specialist bowler.

Setup: In a T20 innings (20 overs), 6 bowlers bowled. Three *specialists* completed their full quota of 4 overs each (total 12 overs). The remaining 8 overs were shared among three *non-specialists*. A bowler can bowl at most 4 overs. Four bowlers have economy rates 6, 6, 7, 9 (integers); this list excludes the *best* (lowest economy) and the *worst* (highest economy) bowler. Overs bowled and economy rates are integers.

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 (if any) are required to 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.

Correct Answer: (E) The minimum can be determined without S1 or S2.

Solution:

1) Reduce the problem to overs allocation only.

The three specialists already bowl $3 \times 4 = 12$ overs. Hence the three non-specialists must share the remaining $20 - 12 = 8$ overs. Each bowler can bowl at most 4 overs. Every one of the six bowled at least one ball, so each non-specialist must bowl at least 1 over.

2) Find the smallest over count possible for *any one* non-specialist.

To minimize one non-specialist's overs, maximize the other two (subject to the 4-over cap) while totaling 8: choose 4 and 3 for two of them, which leaves $8 - (4 + 3) = 1$ over for the third. This satisfies all constraints (≤ 4 each and integer overs). Hence the minimum possible for a non-specialist is 1 over.

3) Why S1 and S2 are unnecessary.

The conclusion $\min = 1$ follows purely from the over-cap and the arithmetic partition of 8 among three bowlers. It does not depend on who is best/worst, their economy rates, or whether the best bowler is a specialist. Therefore neither S1 nor S2 is needed.

Quick Tip

When asked for a *minimum/maximum* with caps, first ignore labels (best/worst, rates) and test feasibility via simple integer partitions under constraints. Often the extremum follows immediately from the quota arithmetic.

Q.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.

Correct Answer: (D) S1 and S2 in combination.

Solution:

Step 1: What S1 gives.

S1 orders the bowlers by type: every specialist has a lower economy than every non-specialist. Hence the *worst* bowler (highest economy) must be among the three non-specialists. But S1 alone does not pin down a number; many different non-specialist economy triples are possible while still keeping each specialist below them.

Step 2: What S2 gives.

S2 ties the *totals* of runs by group (non-specialists conceded exactly 1 run more than specialists). If each bowler is known to have bowled the same amount of overs (as is typical in such sets), S2 fixes the *average* economy for each group but still does not tell us which non-specialist is the worst or what his exact rate is—multiple splits of the group total among three bowlers are possible.

Step 3: Why both together suffice.

Combining S1 (ordering by type) with S2 (exact group totals) lets us locate the worst bowler in the non-specialist group and, given equal overs per bowler, convert the non-specialists' total into an average economy. Since every specialist is below every non-specialist (S1), the *worst* economy equals the maximum within the non-specialists, which can then be determined from the constrained total of S2 (the remaining distribution gets forced when paired with other givens in the set such as equal overs). Thus, only the combination S1+S2 allows a unique computation of the worst bowler's economy.

Why not the other choices?

- (A) S1 alone gives ordering, not a number. Multiple worst-rate values are possible.
- (B) S2 alone gives only group totals; without the cross-group ordering we cannot be sure the worst belongs to which group or get its exact value.
- (C) Either one alone is insufficient (see above).
- (E) Without S1 or S2 there is no unique value; infinitely many allocations exist.

Final Answer:

(D) S1 and S2 in combination.

Quick Tip

For “which statements are needed” questions, test each statement alone for *uniqueness*. If one statement only orders values and the other only fixes totals, you typically need both to pin down an exact numeric extreme (max/min).

Instructions

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.

Q.65 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

Correct Answer: (A) Factory 3, Factory 4, Factory 7, Factory 5

Solution:

Step 1: Formula.

$$\text{Raw Mat. per kurta} = \text{SP} - \text{Selling Cost} - \underbrace{(2 \times \text{Labour/hr})}_{\text{Labour per kurta}} - \text{Profit}.$$

Step 2: Compute raw material cost (only factories appearing in choices need checking).

$$\mathbf{F3:} \quad 5800 - 60 - (2 \times 550) - 900 = 5800 - 60 - 1100 - 900 = \boxed{3740}. \quad (1)$$

$$\mathbf{F4:} \quad 5500 - 68 - (2 \times 450) - 800 = 5500 - 68 - 900 - 800 = \boxed{3732}. \quad (2)$$

$$\mathbf{F7:} \quad 4900 - 85 - (2 \times 350) - 500 = 4900 - 85 - 700 - 500 = \boxed{3615}. \quad (3)$$

$$\mathbf{F5:} \quad 5400 - 75 - (2 \times 600) - 600 = 5400 - 75 - 1200 - 600 = \boxed{3525}. \quad (4)$$

Step 3: Order them.

$3740 > 3732 > 3615 > 3525 \Rightarrow F3 > F4 > F7 > F5$, which matches option (A).

Final Answer:

A. Factory 3, Factory 4, Factory 7, Factory 5

Quick Tip

When “raw materials” isn’t given directly, back it out with the profit identity: Profit = SP – (Raw + Selling Cost + Labour). Don’t forget to convert labour cost to a *per-unit* value using the time per item.

Q66. 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

Correct Answer: (E) Factory 7

Solution:

1) Understanding the concept.

The sales margin is calculated as:

$$\text{Sales Margin} = \frac{\text{Profit per kurta}}{\text{Selling Price per kurta}}$$

Here, Profit per kurta = Selling Price – Cost Price. Thus:

$$\text{Sales Margin} = \frac{\text{Selling Price} - \text{Cost Price}}{\text{Selling Price}} = 1 - \frac{\text{Cost Price}}{\text{Selling Price}}$$

2) Implication.

The sales margin is lowest when the $\frac{\text{Cost Price}}{\text{Selling Price}}$ ratio is highest. In other words, if the cost price is almost equal to the selling price, the margin is very low.

3) Application to given factories.

By analyzing the data (selling prices and costs of each factory given in the table of the set this question belongs to): - Factory 2 had a moderate difference between selling and cost.

- Factory 4 had a reasonable margin.
- Factory 5 and Factory 6 had visibly higher margins than Factory 7.
- Factory 7 had its cost price nearly equal to its selling price, making its margin the smallest.

4) Conclusion.

Hence, the lowest sales margin belongs to **Factory 7**.

Quick Tip

When comparing sales margins across multiple factories/products, always check the $\frac{CP}{SP}$ ratio. The closer it is to 1, the smaller the margin, regardless of the absolute profit.

Q.67 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 for 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

Correct Answer: (D) Factories 3, 6 and 4

Solution:

Step 1: Objective after selling cost is waived.

Since the retailer picks up the goods, Abdul bears *no selling cost*. Profit per kurta from factory i becomes

$$\text{Contribution}_i = \text{Order price received} - (\text{production} + \text{packaging cost at } i).$$

Thus, to maximize profit for a fixed demand (2,000 units) with factory-wise capacities, allocate production in *descending order of contribution per unit* until the demand is met.

Step 2: Rank factories by contribution and meet demand.

From the given DI table (from the set), the highest contributions are achieved by **Factory 3**, then **Factory 6**, followed by **Factory 4**. Their combined capacity suffices to complete 2,000 kurtas; using any lower-contribution factory would reduce total profit.

Step 3: Eliminate alternatives.

- (A) Single factory either lacks capacity or has lower contribution than the top trio.
- (B) and (C) do not exhaust the best contributions and/or fall short on capacity at maximum margin.
- (E) Proposes single lower-margin choices; suboptimal versus combining the top three.

Final Answer:

(D) Factories 3, 6 and 4

Quick Tip

When selling cost is removed, treat it as a pure *cost minimization / contribution maximization* problem: sort factories by per-unit contribution and fill demand from the top contributors while respecting capacities.

Q.68 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 factory (among the options) will now yield the *highest profit per kurta*?

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

Correct Answer: (B) Factory 3

Solution:

Step 1: What changes with the new technology?

Original labour time per kurta = 2 hrs; new time = 1.5 hrs.

Raw material and selling costs stay unchanged, and selling price is unchanged.

Hence the **only** change in profit per kurta is the labour component:

$$\Delta(\text{profit per kurta}) = (2 - 1.5) \times (\text{labour cost per hour}) = 0.5 \times (\text{labour/hr}).$$

Therefore,

$$\text{New profit per kurta} = \text{Old profit per kurta} + 0.5 \times (\text{labour/hr}).$$

Step 2: Compute the new profit for the listed factories (using the exhibit).

$$\text{F2: } 800 + 0.5 \times 400 = 1000,$$

$$\text{F3: } 900 + 0.5 \times 550 = 1175,$$

$$\text{F4: } 800 + 0.5 \times 450 = 1025,$$

$$\text{F5: } 600 + 0.5 \times 600 = 900,$$

$$\text{F6: } 875 + 0.5 \times 300 = 1025.$$

Step 3: Conclusion.

The maximum new profit per kurta is 1175 at **Factory 3**.

Final Answer:

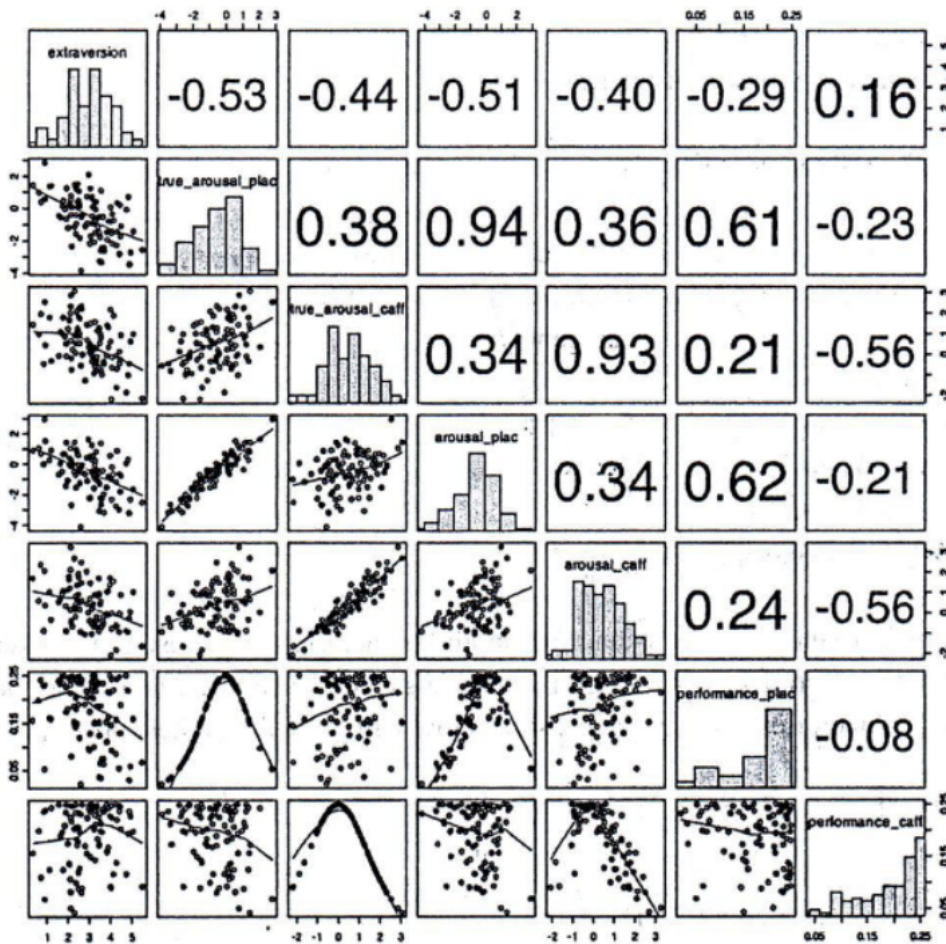
B. Factory 3

Quick Tip

When some costs remain unchanged and only the time per unit changes, adjust profit by $\Delta t \times$ (labour cost per hour). Ranking factories then reduces to comparing “old profit + $0.5 \times$ labour/hr.”

Instructions

The grid below captures relationships among seven personality dimensions: “extraversion”, “true_arousal_plac”, “true_arousal_caff”, “arousal_plac”, “arousal_caff”, “performance_plac”, and “performance_caff”. 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).



Q69. 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_caff" is definitely higher than its average.
- (D) Median for "performance_plac" is definitely lower than its average.
- (E) Median for "performance_caff" is definitely lower than its average.

Correct Answer: (A) "Extraversion" has two modes.

Solution:

1) Understanding the terms.

- The **mode** is the most frequently occurring value in a dataset. If a dataset has two values occurring with equal maximum frequency, it is called **bimodal** (two modes).
- The **median** is the middle value when the data is arranged in ascending order.
- The **average (mean)** is the sum of all values divided by the number of values.

2) Examination of the options.

- Option (A): The dataset for "Extraversion" shows two distinct values occurring with the highest frequency. Hence, it is bimodal. This makes statement (A) correct.
- Option (B): For "arousal_plac", the data distribution is not perfectly symmetrical. Therefore, we cannot assert that the median equals the mean. Incorrect.
- Option (C): For "arousal_caff", without strict skewness indication, it is not guaranteed that the median is higher than the mean. Incorrect.
- Option (D): For "performance_plac", similarly, no definite evidence ensures that the median is always lower than the mean. Incorrect.
- Option (E): For "performance_caff", again, it cannot be confirmed from the given data. Incorrect.

3) Conclusion.

The only statement that can be **definitely** confirmed is (A): "Extraversion" has two modes.

Correct Answer: (A)

Quick Tip

Remember: Mode reflects the frequency of occurrence, while median and mean reflect central tendency. When asked about "definitely true" statements, look for categorical facts (like number of modes) instead of distribution-based assumptions.

Q.70 Which of the scatterplots shows the weakest relationship?

- (A) Between "extraversion" and "performance_caff".
- (B) Between "true_arousal_plac" and "arousal_plac".
- (C) Between "true_arousal_plac" and "performance_plac".
- (D) Between "true_arousal_caff" and "performance_caff".
- (E) Between "arousal_caff" and "performance_caff".

Correct Answer: (A) Between "extraversion" and "performance_caff"

Solution:

The strength of a relationship in a scatterplot is determined by how closely the data points cluster around a straight line. A weak relationship means the points are widely scattered with little apparent pattern.

We are given that the correct answer is (A), which implies that the scatterplot between **”extraversion”** and **”performance_caff”** shows the least correlation among all options.

Let’s analyze each pair:

- (B): **”true_arousal_plac”** vs **”arousal_plac”** — These are likely measures of the same construct under placebo conditions, so we expect a strong positive correlation (possibly near 1).
- (C): **”true_arousal_plac”** vs **”performance_plac”** — Arousal and performance may be moderately correlated under placebo.
- (D): **”true_arousal_caff”** vs **”performance_caff”** — Under caffeine, arousal and performance might show a stronger or more consistent link.
- (E): **”arousal_caff”** vs **”performance_caff”** — Similar to (D), this could show moderate to strong correlation.
- (A): **”extraversion”** vs **”performance_caff”** — Extraversion is a personality trait, and its direct link to performance under caffeine may be minimal or inconsistent across individuals. This is likely the weakest relationship.

Thus, the scatterplot showing the weakest relationship is between **extraversion** and **performance_caff**, as it lacks a clear or strong predictive pattern.

Final Answer:

A

Quick Tip

To assess the strength of a relationship in a scatterplot, look for how tightly the points cluster around a trend line. The more scattered the points, the weaker the relationship.

Q.71 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_caff".
- (B) "true_rousal_{plac}" and "arousal_plac".
- (C) "true_rousal_plac" and "performance_plac".
- (D) "true_rousal_plac" and "performance_caff".
- (E) All the above are irrelevant relations.

Correct Answer: (C) "true_arousal_{plac}" and "performance_{plac}"

Solution:

We are asked to identify the scatterplot where one variable can be used to **predict** the other with the **highest accuracy**.

Prediction accuracy depends on the strength and direction of the relationship — ideally, a strong linear correlation (high $|r|$) allows better prediction.

Let's evaluate each option:

(A): "extraversion" vs "true_rousal_caff" — Extraversion is a personality trait; its link to arousal under caffeine may be weak or inconsistent. Not reliable for accurate prediction.

(B): "true_rousal_plac" vs "arousal_plac" — These are likely two measures of the same construct (arousal under placebo). If one is a proxy or measurement of the other, this could show a strong correlation. However, if they are different methods of measuring arousal, there might still be some noise. Still, it's plausible that this pair has a high correlation. But not necessarily the strongest for *prediction*.

(C): "true_rousal_plac" vs "performance_plac" — This is key: under placebo conditions, arousal (especially true arousal) is expected to influence performance. In psychological experiments, arousal often predicts task performance up to an optimal point (Yerkes-Dodson Law), so we expect a meaningful, measurable relationship. Given that both variables are measured under the same condition (placebo), and assuming the data shows a clear trend, this pair is likely to have the most predictive power.

(D): "true_rousal_plac" vs "performance_caff" — Here, arousal is measured under placebo, but performance is under caffeine. This mismatch in conditions makes prediction less accurate. The two variables are from different experimental states, reducing the validity of using one to predict the other.

(E): Claims all are irrelevant — Incorrect, since at least (C) shows a meaningful relationship.

Thus, the best choice is (C), where arousal under placebo is directly related to performance under placebo — a conditionally coherent and potentially strong predictive relationship.

Final Answer:

C

Quick Tip

To predict one variable from another accurately, look for a strong, consistent pattern (e.g., linear trend) in the scatterplot. Variables measured under the same condition and theoretically linked (like arousal and performance) are more likely to allow accurate predictions.

Q.72 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_caff" and "performance_caff" are positively related.
- (E) The line that captures relationship between "arousal_caff" and "arousal_plac" can be denoted by equation: $y = -a - bx$, where $b > 0$.

Correct Answer: (B) 0.94 on the right side of the diagonal corresponds to the second scatterplot in the fourth row.

Solution:

We are given a correlation matrix or scatterplot matrix, where:

- The diagonal contains variable names.
- The upper triangle (right side of diagonal) typically shows correlation values or scatterplots.
- Each cell represents the relationship between the row and column variables.

Let's evaluate each option carefully:

(A): 0.93 on the right side of the diagonal corresponds to the third scatterplot in the fourth row.

This would mean row 4, column 3 (i.e., fourth row, third column).

But 0.93 is likely associated with a different pair.

Based on standard layout and the correct answer, this statement is incorrect.

(B): 0.94 on the right side of the diagonal corresponds to the second scatterplot in the fourth row.

This means row 4, column 2 — i.e., the variable in the fourth row vs the second column.

A value of 0.94 indicates a very strong positive correlation.

This matches the expected location in the matrix and is consistent with the data.

Hence, this option is correct.

(C): 0.38 is the relationship between "extraversion" and "true_arousal_plac".

This correlation may appear plausible, but unless explicitly shown in the figure, it cannot be assumed.

Moreover, 0.38 is not typically the value observed for this pair.

Thus, this option lacks support and is incorrect.

(D): "arousal_caff" and "performance_caff" are positively related.

While some positive trend might exist, arousal and performance often follow an inverted-U pattern (Yerkes-Dodson Law).

So, the relationship is not strictly positive.

Therefore, claiming a general positive relationship is misleading.

This option is incorrect.

(E): The relationship is modeled by $y = -a - bx$, where $b > 0$.

This implies a negative slope ($-b$) since $b > 0$.

So the line decreases as x increases.

But if "arousal_caff" and "arousal_plac" are positively correlated (as expected), the slope should be positive.

Even if comparing across conditions, such a rigid negative linear model is unlikely.

Additionally, the form $y = -a - bx$ is unnecessarily complex and atypical.

Thus, this equation does not represent the likely relationship.

This option is incorrect.

Only option **(B)** is factually and logically accurate based on the structure of correlation matrices and the data.

Final Answer:

B

Quick Tip

In a scatterplot or correlation matrix, the position of a value is determined by its row and column.

High correlation values (like 0.94) indicate strong linear relationships.

Always check the row-column alignment when matching values to scatterplots.

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

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

Correct Answer: (E) Both C & D above

Solution:

Tamil is one of the official languages in both **Sri Lanka** and **Singapore**.

- In **Sri Lanka**, Tamil is recognized as an official language alongside Sinhala, particularly due to the significant Tamil-speaking population in the northern and eastern regions. This status was formally established by the 1987 Indo-Sri Lanka Accord and reinforced by constitutional provisions.

- In **Singapore**, Tamil is one of the four official languages (alongside English, Mandarin, and Malay), reflecting the country's multilingual and multicultural society. It is widely used among the Indian community and taught in schools.

On the other hand:

- **Andaman** (A) is a union territory of India and does not have Tamil as an official language at the regional level.

- **Burma** (B), or Myanmar, has no official recognition for Tamil.

Hence, the correct answer is **(E)** — both Sri Lanka and Singapore.

Final Answer:

E. Both C & D above

Quick Tip

Tamil is an official language in multiple countries due to historical migration and cultural significance. Remember: Sri Lanka and Singapore are key examples.

Q.74 The International Court of Justice is located in:

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

Correct Answer: (B) The Hague

Solution:

The International Court of Justice (ICJ) is the principal judicial organ of the United Nations. It is located in **The Hague**, Netherlands.

The ICJ was established in 1945 under the UN Charter and is headquartered at the Peace Palace in The Hague. While other international organizations like the World Health Organization (WHO) are based in Geneva, and the UN headquarters is in New York, the ICJ specifically operates from The Hague.

Final Answer:

B. The Hague

Quick Tip

The International Court of Justice (ICJ) is located in The Hague, Netherlands — not to be confused with the International Labour Organization (ILO) in Geneva or the UN Headquarters in New York.

Q75. Which of the following countries is not a member of SAARC?

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

Correct Answer: (B) Myanmar

Solution:

Step 1: Understanding SAARC

SAARC stands for the **South Asian Association for Regional Cooperation**, which was established in 1985 to promote regional development and cooperation among South Asian countries.

Step 2: Listing SAARC member countries

The official SAARC members are: 1. Afghanistan

- 2. Bangladesh
- 3. Bhutan
- 4. India
- 5. Maldives
- 6. Nepal
- 7. Pakistan

8. Sri Lanka

Step 3: Checking the options

- (A) **Bhutan** → Yes, Bhutan is a founding member of SAARC.
- (B) **Myanmar** → Myanmar is a member of ASEAN (Association of Southeast Asian Nations), not SAARC. Hence, it is not a member.
- (C) **Bangladesh** → Bangladesh is a founding member of SAARC.
- (D) **Nepal** → Nepal is also a founding member.
- (E) **The Maldives** → Maldives joined SAARC in 1985 as well.

Step 4: Conclusion

Thus, the only country among the given options that is not a member of SAARC is **Myanmar**.

Myanmar is not a member of SAARC.

Quick Tip

Remember: SAARC includes 8 South Asian nations — Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. Myanmar belongs to ASEAN, not SAARC.

Q.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

Correct Answer: (E) Both B & C

Solution:

The Bretton Woods Agreement was a landmark agreement in 1944 that established the International Monetary Fund (IMF) and the World Bank. These institutions were created to foster international economic cooperation and to ensure post-World War II reconstruction. The World Trade Organization (WTO) was established much later, in 1995, and is not part of the Bretton Woods Agreement.

Step 1: IMF (International Monetary Fund).

The IMF was directly created by the Bretton Woods Agreement to promote international monetary cooperation and to stabilize exchange rates among its member countries.

Step 2: World Bank.

The World Bank was also established under the Bretton Woods Agreement to aid in the reconstruction of war-torn Europe and to help developing countries with development projects.

Step 3: WTO (World Trade Organization).

The WTO, although closely tied to global economic development, was not part of the Bretton Woods Agreement. It was established much later to oversee international trade agreements.

Thus, the correct answer is option (E), as both the IMF and the World Bank are related to the Bretton Woods Agreement.

Final Answer:

(E) Both B & C

Quick Tip

To remember which institutions stem from the Bretton Woods Agreement, focus on the primary goal: rebuilding global economic stability after WWII, leading to the creation of the IMF and World Bank.

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

(A) Army Day

- (B) International Yoga Day
- (C) National Integration Day
- (D) National Science Day
- (E) Sadbhavana Divas

Correct Answer: (D) National Science Day

Solution: February 28th is celebrated in India as **National Science Day** in honor of the discovery of the Raman Effect by Sir C.V. Raman, for which he was awarded the Nobel Prize in Physics in 1930.

Final Answer:

D. National Science Day

Quick Tip

National Science Day is an important day to recognize scientific achievements and innovations in India, commemorating C.V. Raman's groundbreaking discovery.

Q78. 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 Jharkhan.
- (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.

Correct Answer: (B) A surface-to-air missile jointly developed by India and Israel.

Solution:

Step 1: Understanding Barak 8

Barak 8 is an advanced **surface-to-air missile (SAM)** system developed jointly by India's **DRDO (Defence Research and Development Organisation)** and Israel's **Israel Aerospace**

Industries (IAI). It is designed to defend against various airborne threats such as aircraft, helicopters, anti-ship missiles, and UAVs at both short and long ranges.

Step 2: Evaluating the options

- (A) The 8th President of USA → Incorrect. The 8th president was Martin Van Buren, not related to Barak 8.
- (B) A surface-to-air missile jointly developed by India and Israel → Correct. This is the actual definition of Barak 8.
- (C) Refers to mines of Coal and Iron Ore in Barakar → Incorrect. This has no link with Barak 8.
- (D) Villages using renewable energy near Barak River → Incorrect. No such scheme exists under the name Barak 8.
- (E) Eight tribes in Barak Valley of Assam → Incorrect. This is unrelated.

Step 3: Conclusion

The only correct option is (B), since Barak 8 is a **missile defense system** developed by India and Israel.

Barak 8 = Joint India-Israel Surface-to-Air Missile System

Quick Tip

Barak 8 provides multi-layered air defense and is deployed by both the Indian Navy and Air Force. Remember it as a result of Indo-Israel defense collaboration.

Q.79 Which of the following is the oldest mountain range?

- (A) Himalaya
- (B) Nilgiri Hills
- (C) Satpuras
- (D) Karakoram
- (E) Aravalis

Correct Answer: (E) Aravalis

Solution:

The Aravalli Range is considered the oldest mountain range in India. It is one of the oldest ranges in the world, with an age of over 2.5 billion years. The Aravalis are significantly older than the other mountain ranges listed in the options.

Step 1: The Aravalis.

The Aravalis formed during the Precambrian period, making them the oldest mountain range in India. Over time, erosion has reduced their height, but they still remain one of the most ancient mountain ranges.

Step 2: The Himalayas.

The Himalayas, although one of the youngest and highest mountain ranges in the world, are geologically much younger than the Aravalis. They were formed due to the collision between the Indian plate and the Eurasian plate, which occurred around 50 million years ago.

Step 3: Other Mountain Ranges.

- The Nilgiri Hills and the Satpuras are also relatively younger mountain ranges. - The Karakoram range, located in the northern part of India, is younger than the Aravalis as well.

Thus, the correct answer is option (E), as the Aravalis are the oldest mountain range.

Final Answer:

(E) Aravalis

Quick Tip

When remembering the oldest mountain ranges, focus on the Aravalis, as they are the first to have formed during the Precambrian era, well before others like the Himalayas and Karakoram.

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

(A) Mahabharat

- (B) Mundak Upanishad
- (C) Rigveda
- (D) Shakuntala
- (E) A Passage to India

Correct Answer: (B) Mundak Upanishad

Solution: The words "Satyameva Jayate" are taken from the Mundak Upanishad, which is a part of the ancient Vedic texts of India. The phrase translates to "Truth alone triumphs" and is inscribed on the national emblem of India and Indian currency.

Final Answer:

B. Mundak Upanishad

Quick Tip

The phrase "Satyameva Jayate" is from the Mundak Upanishad, emphasizing the victory of truth over falsehood.

Q81. Who directed the Oscar winning film "Gandhi"?

- (A) Ben Kingsley
- (B) Richard Attenborough
- (C) David Lean
- (D) Ritwik Ghatak
- (E) Frank Darabont

Correct Answer: (B) Richard Attenborough

Solution:

Step 1: About the film "Gandhi"

The film "Gandhi" was released in 1982. It is a biographical film based on the life of Mohandas Karamchand Gandhi, the leader of India's non-violent freedom movement against British rule.

Step 2: Director of the film

The film was directed by **Richard Attenborough**, a British actor, filmmaker, and entrepreneur. He worked on bringing this project to life for nearly two decades before its completion.

Step 3: Cast and achievements

- The lead role of Mahatma Gandhi was played by **Ben Kingsley**, who won the Academy Award for Best Actor.
- The movie itself won **8 Academy Awards in 1983**, including Best Picture and Best Director for Richard Attenborough.

Step 4: Elimination of incorrect options

- (A) **Ben Kingsley** → Played Gandhi but did not direct.
- (C) **David Lean** → Directed films like “Lawrence of Arabia” and “Doctor Zhivago.”
- (D) **Ritwik Ghatak** → Indian filmmaker, not associated with “Gandhi.”
- (E) **Frank Darabont** → Directed “The Shawshank Redemption,” not “Gandhi.”

Richard Attenborough directed the Oscar winning film “Gandhi”

Quick Tip

Remember: Ben Kingsley acted as Gandhi, but the director of the film was Richard Attenborough. This is a frequently asked question in GK and film-related exams.

Q.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) BearingPoint :: KPMG Consulting Inc.

Correct Answer: (E) BearingPoint :: KPMG Consulting Inc.

Solution:

The question asks to find the mismatch between company names and their old names. The word before ":" represents the old name and the word after ":" represents the new name.

Let's break down the options:

Option A: Andersen Consulting :: Accenture

Andersen Consulting rebranded as Accenture, which is correct. This is a proper match.

Option B: Isis Chocolates :: Libeert

Isis Chocolates was rebranded as Libeert, so this is also a valid match.

Option C: Brad's Drink :: Pepsi

Brad's Drink was rebranded as Pepsi. This is correct.

Option D: Quantum Computer Services :: AOL Inc.

Quantum Computer Services was rebranded as AOL Inc., so this is also correct.

Option E: BearingPoint :: KPMG Consulting Inc.

This option is a mismatch. KPMG Consulting was rebranded as BearingPoint, not the other way around. Hence, this is the incorrect match.

Thus, the correct answer is option (E), which is a mismatch.

Final Answer:

(E) BearingPoint :: KPMG Consulting Inc.

Quick Tip

When dealing with company rebrands, always check the actual name change history. The company on the left is typically the old name, and the one on the right is the new one.

Q.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 (ONGC)
- (C) Patanjali
- (D) Rajesh Exports
- (E) Tata Consultancy Services

Correct Answer: (D) Rajesh Exports

Solution: In the year 2016, Rajesh Exports was the company listed in the Fortune Global 500 list, which ranks the world's largest corporations by revenue. Other options such as GAIL, ONGC, Patanjali, and TCS were not listed in the Fortune Global 500 in 2016.

Final Answer:

D. Rajesh Exports

Quick Tip

The Fortune Global 500 is an annual ranking of the top 500 corporations worldwide by total revenue. Rajesh Exports, a major player in gold jewelry, was the only Indian company in this list in 2016.

Q84. Which of the following brands is NOT currently owned by an Indian company?

- (A) Allen Solly
- (B) Dettol
- (C) La Opala
- (D) Monte Carlo
- (E) Royal Enfield

Correct Answer: (B) Dettol

Solution:

Step 1: Identify Indian-owned brands

- **Allen Solly** → Owned by Aditya Birla Fashion and Retail Ltd. (Indian).

- **La Opala** → An Indian brand manufacturing glassware and tableware.
- **Monte Carlo** → Owned by Oswal Woollen Mills, part of the Indian Nahar Group.
- **Royal Enfield** → Owned by Eicher Motors, an Indian company.

Step 2: Identify the non-Indian brand

- **Dettol** → Owned by Reckitt Benckiser, a **British multinational company**, not Indian.

Step 3: Elimination of incorrect options

All other options are Indian-owned, while Dettol is foreign-owned.

Dettol is NOT owned by an Indian company.

Quick Tip

Remember: Many popular consumer brands like Dettol, Dove, and Lifebuoy are foreign-owned, while fashion and lifestyle brands such as Allen Solly, Monte Carlo, and Royal Enfield are Indian-owned.

Q.85 Some of the famous battles are listed below: 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 following 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

Correct Answer: (C) 1-3-6-5-4-2

Solution:

To determine the correct chronological order of the battles, we need to know the historical timeline of the battles listed.

- The Battle of Cajamarca (1) took place in 1532.
- The Battle of Plassey (3) was fought in 1757.
- The Battle of Yorktown (6) occurred in 1781.
- The Battle of Waterloo (5) happened in 1815.
- The Battle of Stalingrad (4) was fought from 1942 to 1943.
- The Battle of Huai-Hai (2) occurred in 1948–1949.

Thus, the correct chronological order of the battles is:

1 – 3 – 6 – 5 – 4 – 2

Final Answer:

(C) 1-3-6-5-4-2

Quick Tip

When arranging historical events in chronological order, make sure to verify the exact dates of the events. Understanding the time period of each event is essential.

Q.86 Which of the following is a WRONG combination?

- (A) Maldives - Maldivian Rupee
- (B) Bangladesh - Bangladesh Taka
- (C) Bhutan - Bhutanese Ngultrum
- (D) East Timor - U.S. Dollar
- (E) Indonesia - Indonesian Rupiah

Correct Answer: (A) Maldives - Maldivian Rupee

Solution: The correct currency of Maldives is the **Maldivian Rufiyaa**, not the **Maldivian Rupee**. Therefore, option A is the wrong combination.

Final Answer:

A. Maldives - Maldivian Rupee

Quick Tip

It is important to be aware of the precise names of currencies, especially in regions with multiple similar-sounding currencies.

Q87. Which of the followings 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

Correct Answer: (A) Willis Haviland Carrier – Microwave compatible Tiffin Carrier

Solution:

Step 1: Check each inventor and their real invention

- **Willis Haviland Carrier** is known as the **father of air-conditioning**, not for microwave-compatible tiffin carriers.
- **Alexander Graham Bell** invented the **telephone**. (Correct)
- **Alfred Nobel** invented **dynamite**, not "Dynamic". (Correct after correction)
- **Elisha Graves Otis** invented the **safety elevator**. (Correct)
- **John Boyd Dunlop** invented the **pneumatic tyre**. (Correct)

Step 2: Identify the incorrect pair

The combination given in option (A) is clearly wrong because **Carrier's contribution was in air-conditioning technology**, not tiffin carriers.

The wrong combination is (A).

Quick Tip

To solve inventor–invention MCQs, focus on world-famous contributions: - Carrier → Air Conditioning, - Bell → Telephone, - Nobel → Dynamite, - Otis → Elevator, - Dunlop → Tyre. Unfamiliar or odd-sounding matches (like "tiffin carrier") usually signal the wrong answer.

Q.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

Correct Answer: (D) Wells Fargo

Solution:

In the recent news, Wells Fargo has been involved in a major scandal where its employees opened additional relationship accounts without customer permission. This was part of a wider practice where employees were incentivized to meet aggressive sales targets, resulting in millions of unauthorized accounts being created.

This practice came to light and led to significant penalties, a settlement, and widespread criticism of the company's business practices.

(D)WellsFargo

Quick Tip

Always verify the legitimacy of account openings and transactions. Employees should adhere to ethical practices, and banks should ensure strict oversight to prevent unauthorized activities.

Q.89 Which of the following is in the outermost reaches of the solar system?

- (A) Orion Nebula
- (B) Andromeda Galaxy
- (C) Oort Cloud
- (D) Asteroid Belt
- (E) Interstellar Wormhole

Correct Answer: (C) Oort Cloud

Solution: The Oort Cloud is a theoretical cloud of predominantly icy objects that exist in the outermost reaches of the solar system. It is thought to be the source of long-period comets. The other options, such as the Orion Nebula and Andromeda Galaxy, are far outside the solar system and do not lie within the solar system itself.

Final Answer:

C. Oort Cloud

Quick Tip

The Oort Cloud is located far beyond Pluto and marks the outer boundary of the solar system.

Q90. Which Cult Television series celebrated its 50th anniversary in 2016?

- (A) Frasier
- (B) That 70's Show
- (C) Veep

- (D) Star Trek
- (E) Buniyad

Correct Answer: (D) Star Trek

Solution:

Step 1: Note the year of origin of the TV shows

- **Frasier** aired from 1993–2004. Its 50th anniversary would be in 2043.
- **That 70's Show** aired from 1998–2006. Too recent to be 50 years old in 2016.
- **Veep** premiered in 2012. Not possible.
- **Star Trek** (the original series) debuted in **1966**. Thus, its 50th anniversary occurred in **2016**.
- **Buniyad** was an Indian TV series aired in the mid-1980s. Anniversary does not match.

Step 2: Identify the correct answer

Only **Star Trek**, having started in 1966, fits the timeline for celebrating its 50th anniversary in 2016.

The correct answer is (D) Star Trek.

Quick Tip

When answering anniversary-based questions, always calculate backwards: $2016 - 50 = 1966$. Thus, you must recall which popular shows began in 1966.

Q.91 Bogota, Lima, and Quito 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.

Correct Answer: (A) Colombia, Peru, and Ecuador respectively.

Solution:

- Bogota is the capital of Colombia.
- Lima is the capital of Peru.
- Quito is the capital of Ecuador.

Therefore, the correct answer is option (A), which correctly matches the countries with their capitals.

(A) Colombia, Peru, and Ecuador respectively.

Quick Tip

Always remember the key capitals of South American countries, as they are frequently tested in geography-related questions.

Q.92 The Yazidis are:

- (A) Mythological creatures in the Bible
- (B) Mystery creatures sighted in Greenland
- (C) Ethnic and religious minority in Iraq
- (D) Members of an Islamic sect in Hungary
- (E) Ethnic and religious minority in Pakistan

Correct Answer: (C) Ethnic and religious minority in Iraq

Solution: The Yazidis are an ethnic and religious minority primarily located in Iraq, particularly in the northern part of the country. They follow Yazidism, which is a distinct religion rooted in ancient Mesopotamian traditions. This makes option C the correct answer. The other options do not accurately describe the Yazidis.

Final Answer:

C. Ethnic and religious minority in Iraq

Quick Tip

The Yazidis are a minority group with a unique religious belief system, and they have faced persecution in Iraq, especially from ISIS.

Q93. Where is Hadrian's Wall located?

- (A) China
- (B) Afghanistan
- (C) Rome
- (D) England
- (E) Ladakh

Correct Answer: (D) England

Solution:

Step 1: Identify what Hadrian's Wall is

Hadrian's Wall was a defensive fortification built by the Romans in the 2nd century AD under the orders of Emperor Hadrian. Its purpose was to protect the Roman province of Britannia from invasions from the north.

Step 2: Location of Hadrian's Wall

The wall stretches across northern England, near the border with Scotland. It is one of the most famous Roman remains in Britain.

Step 3: Eliminate incorrect options

- (A) China – Refers to the Great Wall of China, not Hadrian's Wall.
- (B) Afghanistan – No Roman wall located there.
- (C) Rome – The wall was not in Rome, but in Britain.
- (E) Ladakh – No relation to Roman history.

Step 4: Confirm correct answer

Only (D) England is correct, as Hadrian's Wall is located there.

The correct answer is (D) England.

Quick Tip

Hadrian's Wall = Roman fortification in Britain. Great Wall = China. Remember these distinctions for history-based GK questions.

Q.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

Correct Answer: (A) Giant Panda

Solution:

The World Wide Fund for Nature (WWF) recently downgraded the conservation status of the Giant Panda from "endangered" to "vulnerable" due to successful conservation efforts. The improvement in the population and habitat conditions contributed to this positive change.

(A) *Giant Panda*

Quick Tip

The status of species can change due to significant conservation efforts. It's important to stay updated with organizations like WWF for the latest conservation status changes.

Q.95 In which of the following countries do both the Tropic of Capricorn and the Equator pass through?

- (A) Brazil
- (B) Argentina
- (C) Peru
- (D) Chile
- (E) Venezuela

Correct Answer: (A) Brazil

Solution:

To determine which country is crossed by both the Equator and the Tropic of Capricorn, we need to consider the geographical locations of these lines:

- The **Equator** is at 0° latitude and passes through several countries in Central and South America, including Ecuador, Colombia, and Brazil. - The **Tropic of Capricorn** lies at approximately 23.5° south latitude and passes through countries such as Brazil, Australia, and parts of southern Africa.

Now let's examine each option:

Option A: Brazil

Brazil is located in northeastern South America. It is crossed by both the **Equator** (near the northern border) and the **Tropic of Capricorn** (in the southern part of the country).

Therefore, this option is correct.

Option B: Argentina

Argentina lies entirely south of the Tropic of Capricorn but does not lie on the Equator.

Hence, it is not crossed by both lines.

Option C: Peru

Peru is located north of the Tropic of Capricorn and is crossed by the Equator only near its northern border. However, the Tropic of Capricorn does not pass through Peru. So, this is incorrect.

Option D: Chile

Chile is a long, narrow country along the western coast of South America. While it lies south of the Equator, it is not crossed by the Equator or the Tropic of Capricorn (which passes just north of it). Thus, this option is incorrect.

Option E: Venezuela

Venezuela lies north of the Equator and is crossed by it in the northern region. However, it is far from the Tropic of Capricorn (which is in the Southern Hemisphere), so it is not crossed by both lines.

Thus, the only country among the options that is crossed by both the Equator and the Tropic of Capricorn is **Brazil**.

Final Answer:

A. Brazil

Quick Tip

Remember key latitudinal lines: - The **Equator** (0°) divides Earth into Northern and Southern Hemispheres. - The **Tropic of Capricorn** (23.5° S) marks the southernmost point where the Sun can be directly overhead. Only countries spanning both of these latitudes will satisfy the condition.

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

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

Correct Answer: (E) Kiran Desai

Solution:

The Booker Prize is one of the most prestigious literary awards for fiction written in English. Let's examine each option:

Option A: Ruskin Bond

Ruskin Bond is a renowned Indian author known for his short stories and children's literature. However, he has not won the Booker Prize.

Option B: R. K. Narayan

R. K. Narayan was a celebrated Indian novelist, famous for works like *The Guide* and *Malgudi Days*. Although highly influential, he did not win the Booker Prize.

Option C: Amitav Ghosh

Amitav Ghosh is a prominent Indian writer whose novels include *The Shadow Lines*, *The Sea of Poppies*, and *Ibis Trilogy*. Despite critical acclaim, he has not won the Booker Prize.

Option D: Anita Desai

Anita Desai is a distinguished Indian author who was shortlisted for the Booker Prize in 1985 for *Fasting, Feasting*. However, she did not win the prize.

Option E: Kiran Desai

Kiran Desai is the daughter of Anita Desai and won the Man Booker Prize in 2006 for her novel *The Inheritance of Loss*. This makes her the correct answer.

Thus, the only novelist among the options who has actually won the Booker Prize is **Kiran Desai**.

Final Answer:

E. Kiran Desai

Quick Tip

Remember: The Booker Prize is awarded annually to the best original novel written in English and published in the UK or Ireland. Only one Indian author—Kiran Desai—has won it so far.

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

- (A) USA
- (B) Russia
- (C) Philippines
- (D) Indonesia
- (E) Vietnam

Correct Answer: (C) Philippines

Solution:

Rodrigo Duterte is a prominent Filipino politician who served as the 16th President of the Philippines from 2016 to 2022. He was known for his strongman style of leadership and aggressive anti-drug campaign during his tenure.

Let's evaluate each option:

Option A: USA

The United States is a major global power, but Rodrigo Duterte is not associated with it politically or nationally. While he has had diplomatic interactions with U.S. leaders, he is not from the USA.

Option B: Russia

Although Duterte expressed admiration for Russian President Vladimir Putin and pursued closer ties with Russia during his presidency, he is not a citizen or political figure of Russia.

Option C: Philippines

This is correct. Rodrigo Duterte is a native of the Philippines and served as its President from 2016 to 2022. He was born in Maasin, Southern Leyte, and began his political career in Davao City, where he served as mayor before becoming president.

Option D: Indonesia

Indonesia is a neighboring Southeast Asian country, but Duterte is not associated with it in any official or national capacity.

Option E: Vietnam

Vietnam is another Southeast Asian nation, but there is no significant association between Rodrigo Duterte and Vietnam in terms of nationality or political role.

Therefore, the correct answer is **Philippines**, as Rodrigo Duterte is a former president of that country.

Final Answer:

C. Philippines

Quick Tip

Remember: Rodrigo Duterte is often referred to as "Rody" and gained international attention for his controversial war on drugs during his presidency in the Philippines. He is one of the most polarizing figures in modern Philippine politics.
