

KMAT 2024 Question Paper with Solutions

Time Allowed :3 Hours	Maximum Marks :720	Total Questions :180
-----------------------	--------------------	----------------------

General Instructions

Read the following instructions very carefully and strictly follow them:

1. This question paper is divided into four sections:

1. (i) **Data Sufficiency and Logical Reasoning:** 40 questions (40 questions \times 4 marks) for a total of 160 marks.
2. (ii) **Quantitative Aptitude:** 50 questions (50 questions \times 4 marks each) for a total of 200 marks.
3. (iii) **English Language Usage and Reading Comprehension:** 50 questions (50 questions \times 4 marks each) for a total of 200 marks.
4. (iv) **General Knowledge and Current Affairs:** 40 questions (40 questions \times 4 marks each) for a total of 160 marks.

2. The total number of questions is 180, carrying a maximum of 720 marks.

3. The duration of the exam is 3 hours.

4. Marking scheme:

1. (i) 4 marks for a correct answer, and $\frac{1}{4}$ mark will be deducted for every incorrect response.
2. (ii) No marks will be awarded for unanswered questions.

5. Follow the instructions provided during the exam for submitting your answers.

1: Identify the correctly spelled word:

- (A) Relevent
- (B) Relavent
- (C) Relevant
- (D) Relavant

Correct Answer: (C) Relevant

Solution:

Step 1: Understanding the correct spelling. The word **relevant** means closely connected to the subject at hand.

Step 2: Identifying the incorrect options.

1. Relevent (Incorrect: "e" instead of "a")
2. Relavent (Incorrect: "a" instead of "e")
3. Relavant (Incorrect: misplaced "a")

Step 3: Selecting the correct option. The correct spelling is **Relevant**.

Quick Tip

A useful trick to check spelling is to break the word into syllables: Re-le-vant (Correct)
vs. Re-le-vent (Incorrect)

2: Choose the correctly spelled word from the options below:

- (A) Neccessary
- (B) Necessary
- (C) Necessary
- (D) Neccesary

Correct Answer: (C) Necessary

Solution:

Step 1: Understanding the correct spelling. The word **necessary** means required or essential.

Step 2: Identifying the incorrect options.

1. Neccessary (Incorrect: extra "c")
2. Necesary (Incorrect: missing "s")
3. Neccesary (Incorrect: misplaced letters)

Step 3: Selecting the correct option. The correct spelling is **Necessary**.

Quick Tip

Remember: One "C", two "S" – Necessary.

3: Identify the correctly spelled word:

- (A) Consciece
- (B) Conscience
- (C) Consience
- (D) Consciense

Correct Answer: (B) Conscience

Solution:

Step 1: Understanding the correct spelling. The word **conscience** refers to an inner sense of right and wrong.

Step 2: Identifying the incorrect options.

1. Consciece (Incorrect: missing "n")
2. Consience (Incorrect: missing "c")
3. Consciense (Incorrect: misplaced "s")

Step 3: Selecting the correct option. The correct spelling is **Conscience**.

Quick Tip

A trick to remember: Con + Science = Conscience.

4: Find the correctly spelled word:

- (A) Persuade
- (B) Persuaid
- (C) Persuadee
- (D) Perswade

Correct Answer: (A) Persuade

Solution:

Step 1: Understanding the correct spelling. The word **persuade** means to convince someone.

Step 2: Identifying the incorrect options.

1. Persuaid (Incorrect: incorrect vowel combination)
2. Persuadee (Incorrect: extra "e")
3. Perswade (Incorrect: "w" instead of "u")

Step 3: Selecting the correct option. The correct spelling is **Persuade**.

Quick Tip

"Persuade" is spelled like "Suede" (a type of fabric).

5: Identify the misspelled word in the list below:

- (A) Accommodate
- (B) Mischievous

(C) Embarras

(D) Irresistible

Correct Answer: (C) Embarras

Solution:

Step 1: Identifying the correct spelling. The correct spelling of the word should be **Embarrass**.

Step 2: Checking the incorrect word.

1. Accommodate (Correct)
2. Mischievous (Correct)
3. Embarras (Incorrect, missing an extra "s")
4. Irresistible (Correct)

Step 3: Selecting the misspelled word. The incorrect spelling is **Embarras**, which should be **Embarrass**.

Quick Tip

Remember: Double "R", double "S" – Embarrass.

6: Identify the word that has the same meaning as "FORTITUDE" in the list given below:

(A) Courage

(B) Deceit

(C) Frivolity

(D) Ambivalence

Correct Answer: (A) Courage

Solution:

Step 1: Understanding the meaning of "FORTITUDE". The word **fortitude** refers to mental and emotional strength in facing difficulties.

Step 2: Identifying the correct synonym.

1. Courage (Correct: Fortitude means bravery and resilience)
2. Deceit (Incorrect: Means dishonesty)
3. Frivolity (Incorrect: Means lack of seriousness)
4. Ambivalence (Incorrect: Means having mixed feelings)

Step 3: Selecting the correct option. The best synonym is **Courage**.

Quick Tip

"Fortitude" is derived from Latin *fortis*, meaning "strong." It signifies inner strength and endurance.

7: Choose the word that is closest in meaning to the word "PRECISE" from the options provided:

- (A) Ambiguous
- (B) Accurate
- (C) Vague
- (D) Dubious

Correct Answer: (B) Accurate

Solution:

Step 1: Understanding the meaning of "PRECISE". The word **precise** means exact and accurate.

Step 2: Identifying the closest synonym.

1. Ambiguous (Incorrect: Means unclear or open to interpretation)
2. Accurate (Correct: Precise means exact and correct)

3. Vague (Incorrect: Means not clearly defined)
4. Dubious (Incorrect: Means doubtful)

Quick Tip

"Precise" means clear and exact, while "ambiguous" and "vague" mean the opposite.

8: Find the word with a similar meaning to "BENEVOLENT" in the list below:

- (A) Malevolent
- (B) Hostile
- (C) Friendly
- (D) Pessimistic

Correct Answer: (C) Friendly

Solution:

Step 1: Understanding the meaning of "BENEVOLENT". The word **benevolent** means kind, generous, and well-meaning.

Step 2: Identifying the correct synonym.

1. Malevolent (Incorrect: Means evil or harmful)
2. Hostile (Incorrect: Means unfriendly or aggressive)
3. Friendly (Correct: Benevolent people are kind and friendly)
4. Pessimistic (Incorrect: Means having a negative outlook)

Quick Tip

"Benevolent" comes from the Latin words *bene* (good) and *volent* (wishing). It means wishing well for others.

9: Find the word with a similar meaning to "EXUBERANT" from the options below:

- (A) Dull
- (B) Energetic
- (C) Hesitant
- (D) Melancholic

Correct Answer: (B) Energetic

Solution:

Step 1: Understanding the meaning of "EXUBERANT". The word **exuberant** means full of energy, enthusiasm, and excitement.

Step 2: Identifying the correct synonym.

1. Dull (Incorrect: Means boring or lacking energy)
2. Energetic (Correct: Exuberant people are lively and full of life)
3. Hesitant (Incorrect: Means unsure or reluctant)
4. Melancholic (Incorrect: Means sad or gloomy)

Quick Tip

"Exuberant" people overflow with energy. Think of someone cheering loudly at a game!

10: Identify the word that has a similar meaning to "PEACEFUL" in the options provided:

- (A) Chaotic
- (B) Tranquil
- (C) Aggressive
- (D) Turbulent

Correct Answer: (B) Tranquil

Solution:

Step 1: Understanding the meaning of "PEACEFUL". The word **peaceful** means calm, free from disturbance, and tranquil.

Step 2: Identifying the correct synonym.

1. Chaotic (Incorrect: Means disorderly and noisy)
2. Tranquil (Correct: Means calm and peaceful)
3. Aggressive (Incorrect: Means forceful or violent)
4. Turbulent (Incorrect: Means unstable or in conflict)

Quick Tip

"Tranquil" means calm and serene, like a quiet lake with no ripples.

article amsmath [most]tcolorbox

11: Choose the word that is synonymous with "CUNNING" from the list below:

- (A) Honest
- (B) Devious
- (C) Transparent
- (D) Naive

Correct Answer: (B) Devious

Solution:

Step 1: Understanding the meaning of "CUNNING". The word **cunning** refers to being skillful in achieving goals through deceit or cleverness.

Step 2: Identifying the correct synonym.

1. Honest (Incorrect: Opposite of cunning)
2. Devious (Correct: Means crafty and deceitful)
3. Transparent (Incorrect: Means open and straightforward)
4. Naive (Incorrect: Means innocent and inexperienced)

Quick Tip

"Cunning" and "Devious" both imply clever trickery or deception.

12: Identify the word with the opposite meaning to "EVIDENT" in the list provided:

- (A) Obvious
- (B) Concealed
- (C) Clear
- (D) Apparent

Correct Answer: (B) Concealed

Solution:

Step 1: Understanding the meaning of "EVIDENT". The word **evident** means clearly seen or understood.

Step 2: Identifying the antonym.

1. Obvious (Incorrect: Similar in meaning)
2. Concealed (Correct: Means hidden or not visible)
3. Clear (Incorrect: Synonym of evident)
4. Apparent (Incorrect: Means obvious or easily seen)

Quick Tip

"Concealed" means hidden, which is the opposite of evident (clearly visible).

13: Find the word that has an opposite meaning to "HARMONY" from the options below:

- (A) Discord

- (B) Unity
- (C) Accord
- (D) Consensus

Correct Answer: (A) Discord

Solution:

Step 1: Understanding the meaning of "HARMONY". The word **harmony** means agreement, peace, and unity.

Step 2: Identifying the antonym.

1. Discord (Correct: Means disagreement and lack of harmony)
2. Unity (Incorrect: Means togetherness, similar to harmony)
3. Accord (Incorrect: Means agreement)
4. Consensus (Incorrect: Means general agreement)

Quick Tip

"Harmony" is about peace and unity, while "Discord" is about conflict and disagreement.

14: Choose the word that has opposite meaning to "FRAUDULENT" in the list given below:

- (A) Dishonest
- (B) Trustworthy
- (C) Deceptive
- (D) Unethical

Correct Answer: (B) Trustworthy

Solution:

Step 1: Understanding the meaning of "FRAUDULENT". The word **fraudulent** means dishonest or deceptive.

Step 2: Identifying the antonym.

1. Dishonest (Incorrect: Similar in meaning)
2. Trustworthy (Correct: Means honest and reliable)
3. Deceptive (Incorrect: Similar to fraudulent)
4. Unethical (Incorrect: Means morally wrong)

Quick Tip

"Fraudulent" means deceptive, while "Trustworthy" means honest and reliable.

15: Convert the sentence into DIRECT SPEECH: She suggested, "Why don't we go for a walk?"

- (A) She said, "Let us go for a walk."
- (B) She said, "Why not we go for a walk?"
- (C) She said, "Shall we go for a walk?"
- (D) She said, "Why don't we went for a walk."

Correct Answer: (C) She said, "Shall we go for a walk?"

Solution:

Step 1: Understanding the conversion to direct speech. When converting indirect speech to direct speech, we ensure proper grammatical structure and sentence flow.

Step 2: Checking each option for correctness.

1. She said, "Let us go for a walk." (Incorrect: Doesn't reflect suggestion)
2. She said, "Why not we go for a walk?" (Incorrect: Incorrect word order)
3. She said, "Shall we go for a walk?" (Correct: Proper direct speech format)

4. She said, "Why don't we went for a walk." (Incorrect: Grammar mistake)

Quick Tip

When converting to direct speech, keep the original structure of the question and use correct grammar.

16: Change the sentence into DIRECT SPEECH: He advised, "You should study regularly to do well in exams."

- (A) He said, "You should study regularly to do well in exams."
- (B) He said, "Study regularly to do well in exams."
- (C) He said, "You must study regularly for success in exams."
- (D) He said, "To do well in exams, you should study regularly."

Correct Answer: (A) He said, "You should study regularly to do well in exams."

Solution:

Step 1: Understanding direct speech. Direct speech maintains the original wording of the spoken sentence within quotation marks.

Step 2: Identifying the correct format.

1. Option (A) maintains the exact structure of the reported speech.
2. Option (B) changes the wording and removes "you should."
3. Option (C) modifies "should" to "must," altering the meaning.
4. Option (D) restructures the sentence incorrectly.

Quick Tip

When converting to direct speech, keep the original sentence structure as much as possible.

17: Convert the sentence into INDIRECT SPEECH: She said, "I will visit my grandmother tomorrow."

- (A) She stated that she would visit her grandmother the next day.
- (B) She announced, "I will visit my grandmother tomorrow."
- (C) She declared that she is visiting her grandmother tomorrow.
- (D) She mentioned that she will visit her grandmother tomorrow.

Correct Answer: (A) She stated that she would visit her grandmother the next day.

Solution:

Step 1: Converting direct to indirect speech.

1. The pronoun "I" changes to "she."
2. The verb "will" changes to "would."
3. The word "tomorrow" changes to "the next day."

Step 2: Selecting the correct option. Only Option (A) applies all the changes correctly.

Quick Tip

In indirect speech, future tense "will" changes to "would," and time indicators like "tomorrow" change to "the next day."

18: Change the sentence into INDIRECT SPEECH: Tom exclaimed, "What a surprise!"

- (A) Tom exclaimed that it was a surprise.
- (B) Tom exclaimed, "What a surprising event!"
- (C) Tom exclaimed, "How surprising it was!"
- (D) Tom exclaimed, "What a surprise!" remained unchanged.

Correct Answer: (A) Tom exclaimed that it was a surprise.

Solution:

Step 1: Converting direct to indirect speech.

1. Exclamatory sentences are converted into statements.
2. "What a surprise!" is rephrased as "it was a surprise."

Step 2: Selecting the correct option. Option (A) properly changes the exclamation to a statement.

Quick Tip

For exclamatory sentences, remove quotation marks and convert them into a statement.

19: Identify the Mood and Tense of the verb in the following sentence: "May you have a wonderful day!"

- (A) Imperative, Simple Past
- (B) Subjunctive, Present Continuous
- (C) Imperative, Simple Present
- (D) Subjunctive, Future Perfect

Correct Answer: (C) Imperative, Simple Present

Solution:

Step 1: Understanding the mood and tense.

1. The imperative mood is used for commands or wishes.
2. The phrase "May you have" expresses a wish, which falls under the imperative mood.
3. The verb "have" is in the simple present tense.

Quick Tip

Imperative mood expresses commands, wishes, or requests. If a sentence starts with "May," it is usually imperative.

20: Convert the sentence into ACTIVE VOICE: "The cake was baked by the chef."

- (A) The chef bakes the cake.
- (B) The chef baked the cake.
- (C) The chef is baking the cake.
- (D) The chef had baked the cake.

Correct Answer: (B) The chef baked the cake.

Solution:

Step 1: Understanding voice conversion.

1. Passive voice structure: Object + "was" + past participle + "by subject."
2. Active voice structure: Subject + verb + object.

Step 2: Identifying the correct transformation.

1. "The cake was baked by the chef." (Passive)
2. "The chef baked the cake." (Active - Correct transformation)

Quick Tip

To convert passive voice to active voice, switch the subject and object, and remove "was" or "is."

21: Change the sentence into ACTIVE VOICE: A solution will be found by our team.

- (A) Our team is finding a solution.
- (B) Our team finds a solution.

(C) Our team found a solution.

(D) Our team will find a solution.

Correct Answer: (D) Our team will find a solution.

Solution:

Step 1: Understanding passive to active voice conversion.

1. Passive voice: "A solution will be found by our team."
2. Identify subject: "Our team"
3. Identify verb: "will be found" (future passive)
4. Convert to active: "Our team will find a solution."

Quick Tip

In active voice, the subject performs the action. In passive voice, the subject receives the action.

22: Convert the sentence given in the question into PASSIVE VOICE: Who created this?

(A) By whom was this create?

(B) By whom was this being created?

(C) By whom was this created?

(D) By whom is this created?

Correct Answer: (C) By whom was this created?

Solution:

Step 1: Understanding the passive voice conversion.

1. "Who created this?" (Active)
2. Subject: "Who"

3. Verb: "created" (past tense)
4. Passive structure: "By whom was this created?"

Quick Tip

For interrogative passive sentences, use "By whom" + helping verb + past participle.

23: The following question has two blanks. Choose the words for each blank which best fit the meaning of the sentence as a whole. She is to become successful entrepreneur in the future.

- (A) ambitious, a
- (B) aspiring, the
- (C) eager, a
- (D) reluctant, the

Correct Answer: (A) ambitious, a

Solution:

Step 1: Understanding the correct word choice.

1. "Ambitious" describes someone who has strong desires to achieve something.
2. "A successful entrepreneur" is correct because "entrepreneur" starts with a consonant sound.

Quick Tip

Use "a" before words starting with consonant sounds and "the" for specific references.

24: The following question has two blanks. Choose the words for each blank which best fit the meaning of the sentence as a whole. is the first step towards wisdom, and is the key to success.

- (A) Patience, perseverance
- (B) Perseverance, patience
- (C) Wisdom, perseverance
- (D) Success, patience

Correct Answer: (B) Perseverance, patience

Solution:

Step 1: Understanding the meaning of the sentence.

1. "Perseverance is the first step towards wisdom" – Continuous effort leads to knowledge.
2. "Patience is the key to success" – Endurance leads to achieving goals.

Quick Tip

Perseverance is about continuous effort, while patience is about waiting with a positive attitude.

25: The following question has two blanks. Choose the words for each blank which best fit the meaning of the sentence as a whole. is the ability to adapt to change, and is the strength to initiate it.

- (A) Flexibility, innovation
- (B) Innovation, flexibility
- (C) Creativity, resilience
- (D) Resilience, creativity

Correct Answer: (A) Flexibility, innovation

Solution:

Step 1: Understanding the meaning of the sentence.

1. "Flexibility is the ability to adapt to change" – Being open to new ideas.

2. "Innovation is the strength to initiate change" – Introducing new ideas or methods.

Quick Tip

Flexibility allows adaptation, while innovation drives new changes.

26: The following question has two blanks. Choose the words for each blank which best fit the meaning of the sentence as a whole. She has been an inspiration to many, proving that with determination and passion, anyone can overcome obstacles and achieve goals.

- (A) insurmountable, their
- (B) daunting, his
- (C) formidable, her
- (D) overwhelming, its

Correct Answer: (A) insurmountable, their

Solution:

Step 1: Understanding the word choice.

1. Insurmountable means impossible to overcome, which fits with "obstacles."
2. Their is used as a neutral possessive pronoun for "anyone," making it grammatically correct.

Quick Tip

"Insurmountable obstacles" is a common phrase meaning challenges that seem impossible to overcome.

27: Choose the words for each blank which best fit the meaning of the sentence as a whole. is crucial in building a strong team, and is essential for maintaining a healthy work environment.

- (A) Communication, cooperation
- (B) Cooperation, communication
- (C) Trust, collaboration
- (D) Collaboration, trust

Correct Answer: (A) Communication, cooperation

Solution:

Step 1: Understanding the relationship between the words.

1. Communication is crucial for teamwork.
2. Cooperation is necessary for a good work environment.

Quick Tip

Effective communication leads to better cooperation in any team setting.

28: Choose the words for each blank that best fit the meaning of the sentence as a whole. The success of any project depends on planning and execution.

- (A) meticulous, flawless
- (B) meticulous, careful
- (C) haphazard, careful
- (D) detailed, flawless

Correct Answer: (A) meticulous, flawless

Solution:

Step 1: Understanding the meaning of the words.

1. Meticulous planning means careful and detailed preparation.
2. Flawless execution means carrying out the task without mistakes.

Quick Tip

Success comes from meticulous planning and flawless execution.

29: Choose the words for each blank that best fit the meaning of the sentence as a whole. is the key to unlocking potential, and is the pathway to continuous improvement.

- (A) Reflection, feedback
- (B) Feedback, reflection
- (C) Practice, critique
- (D) Critique, practice

Correct Answer: (A) Reflection, feedback

Solution:

Step 1: Understanding the logical relationship.

1. Reflection helps individuals unlock their potential by assessing their strengths and weaknesses.
2. Feedback allows for continuous improvement by providing constructive criticism.

Quick Tip

To improve, first reflect on your work, then seek feedback for growth.

30: Reorder the parts to create a coherent sentence: A: for various health benefits B: meditation is practiced C: such as reducing stress D: worldwide

- (A) BCDA
- (B) DCAB
- (C) ACBD

(D) DABC

Correct Answer: (C) ACBD

Solution:

Step 1: Identifying the logical sentence structure.

1. The phrase should start with A: "for various health benefits" to introduce the topic.
2. C: "such as reducing stress" follows naturally as an example.
3. B: "meditation is practiced" states the main action.
4. D: "worldwide" completes the sentence.

Quick Tip

When reordering sentences, start with the main topic, follow with examples, and end with additional details.

31: Rearrange the parts to form a meaningful sentence: A: enjoy various B: tourists can C: outdoor activities D: during their stay

(A) BACD

(B) DCBA

(C) ACBD

(D) DACB

Correct Answer: (A) BACD

Solution:

Step 1: Identifying the logical sentence structure.

1. "Tourists can" (B) should start the sentence.
2. "Enjoy various" (A) follows naturally.
3. "Outdoor activities" (C) describes what they can enjoy.

4. "During their stay" (D) provides additional context.

Quick Tip

When rearranging sentences, start with the subject and then order phrases logically.

32: Read the passage and answer the question.

In a small village, there was a scarcity of water, and the only well in the vicinity was often dry during the hot summer months. The villagers, tired of this recurring problem, decided to take matters into their own hands. They organized a community initiative to build a reservoir to store water during the rainy season and provide a steady supply throughout the year. The project required teamwork and dedication, but the villagers were determined to overcome the water crisis. With a collective effort, they completed the reservoir, ensuring that every household had access to water even in the driest months.

The villagers' initiative demonstrates their commitment to:

- (A) Agricultural development
- (B) Community welfare
- (C) Industrial expansion
- (D) Environmental conservation

Correct Answer: (B) Community welfare

Solution:

Step 1: Understanding the key idea of the passage.

1. The villagers worked together for a community-driven water storage project.
2. Their efforts directly benefited the entire village, ensuring a steady water supply.

Quick Tip

"Community welfare" refers to initiatives that improve living conditions for all members of society.

33: Read the passage and answer the question.

A group of young activists started a campaign to raise awareness about the importance of recycling in their neighborhood. They conducted workshops, distributed pamphlets, and organized community clean-up events. Their efforts aimed to encourage residents to adopt sustainable practices and reduce waste. As a result of their campaign, more households began sorting and recycling their waste, contributing to a cleaner and greener environment. The activists' campaign primarily focused on promoting:

- (A) Renewable energy
- (B) Wildlife conservation
- (C) Environmental awareness
- (D) Air pollution control

Correct Answer: (C) Environmental awareness

Solution:

Step 1: Identifying the main focus of the passage.

1. The campaign emphasized recycling, waste management, and sustainable practices.
2. This aligns best with environmental awareness.

Quick Tip

"Environmental awareness" includes actions that educate people about sustainability and eco-friendly practices.

34: Read the passage and answer the question.

In a remote village, where access to healthcare was limited, a group of dedicated volunteers established a mobile medical clinic. The clinic visited the village regularly, providing free medical check-ups and consultations and distributing essential medicines. The villagers, who

previously had to travel long distances for medical assistance, greatly benefited from this initiative.

The mobile clinic initiative reflects the volunteers' commitment to:

- (A) Educational development
- (B) Public transportation
- (C) Healthcare accessibility
- (D) Agricultural reform

Correct Answer: (C) Healthcare accessibility

Solution:

Step 1: Identifying the primary focus of the passage.

1. The passage discusses medical services being brought to the village.
2. The key phrase is "providing free medical check-ups and distributing medicines", which refers to healthcare accessibility.

Quick Tip

"Healthcare accessibility" means ensuring medical services are available to underserved populations.

35: Read the passage and answer the question.

A group of young entrepreneurs initiated a project to empower local artisans to preserve traditional craftsmanship. They collaborated with skilled artisans to create a platform where their handmade products could reach a wider market. The artisans gained economic independence through this initiative, and traditional art forms thrived.

The entrepreneurs' project primarily focused on promoting:

- (A) Economic diversity
- (B) Globalization

(C) Technological innovation

(D) Cultural heritage

Correct Answer: (D) Cultural heritage

Solution:

Step 1: Identifying the key focus of the passage.

1. The passage highlights preserving traditional craftsmanship and supporting artisans.
2. This aligns with cultural heritage, which refers to protecting traditions, art, and skills from the past.

Quick Tip

"Cultural heritage" includes traditions, arts, and crafts passed down through generations.

36: Read the passage and answer the question.

In a society where gender stereotypes were prevalent, many students started a campaign to challenge these norms. They organized workshops, discussions, and awareness programs to promote gender equality and empower individuals to break free from traditional expectations. The students' campaign primarily aimed at challenging:

- (A) Educational policies
- (B) Racial discrimination
- (C) Gender stereotypes
- (D) Environmental degradation

Correct Answer: (C) Gender stereotypes

Solution:

Step 1: Identifying the main focus of the campaign.

1. The campaign focuses on gender equality and breaking stereotypes.

2. The correct term for this issue is gender stereotypes.

Quick Tip

”Gender stereotypes” refer to fixed ideas about how men and women should behave in society.

37: Read the passage and answer the question.

A group of environmentally conscious citizens initiated a tree-planting campaign to combat the rising pollution levels in their city. They encouraged residents to participate in the drive, providing saplings and guidance on suitable planting locations. The campaign aimed to enhance green cover, reduce air pollution, and create a healthier living environment. The citizens’ initiative primarily focused on addressing:

- (A) Traffic congestion
- (B) Noise pollution
- (C) Deforestation
- (D) Air pollution

Correct Answer: (D) Air pollution

Solution:

Step 1: Identifying the main environmental issue.

1. The campaign involved planting trees to reduce pollution.
2. Trees help in absorbing carbon dioxide and improving air quality.

Quick Tip

”Air pollution” is reduced through tree plantation, cleaner energy, and reduced emissions.

38: Read the passage and answer the question.

Concerned about the lack of educational resources in underserved communities, a group of teachers launched a mobile library project. They traveled to remote areas, offering books and educational materials to children without access to formal schooling. The project aimed to bridge the educational gap and promote a love for learning among disadvantaged children. The teachers' initiative primarily focused on addressing:

- (A) Economic inequality
- (B) Healthcare disparities
- (C) Educational accessibility
- (D) Cultural preservation

Correct Answer: (C) Educational accessibility

Solution:

Step 1: Identifying the key challenge being addressed.

1. The project focuses on bringing books and learning materials to children.
2. This falls under educational accessibility, as it helps children who lack formal schooling.

Quick Tip

"Educational accessibility" means making education available to all, regardless of location or background.

39: Read the passage and answer the question.

In a world grappling with the effects of climate change, a team of scientists initiated a research project to develop sustainable agricultural practices. They focused on creating methods that enhance crop yields while minimizing environmental impact. The project aimed to offer solutions for ensuring food security in the face of climate challenges. The scientists' initiative primarily focused on addressing:

- (A) Technological innovation

- (B) Biodiversity conservation
- (C) Climate change adaptation
- (D) Urbanization challenges

Correct Answer: (C) Climate change adaptation

Solution:

Step 1: Identifying the key theme of the passage.

1. The passage discusses developing sustainable agricultural practices.
2. These efforts help adapt to climate change by ensuring food production despite environmental challenges.

Quick Tip

”Climate change adaptation” involves adjusting agricultural, social, and economic systems to cope with climate shifts.

40: Read the passage and answer the question.

Recognizing the importance of mental health awareness, a group of mental health professionals launched a campaign to destigmatize mental health issues. Through seminars, online resources, and community events, they aimed to promote open discussions and provide support for those struggling with mental health challenges.

The professionals’ campaign primarily focused on addressing:

- (A) Physical disabilities
- (B) Social inequality
- (C) Mental health stigma
- (D) Substance abuse

Correct Answer: (C) Mental health stigma

Solution:

Step 1: Identifying the primary goal of the campaign.

1. The campaign focuses on raising awareness about mental health issues.
2. The phrase "destigmatize mental health issues" indicates they are addressing mental health stigma.

Quick Tip

"Mental health stigma" refers to negative beliefs and stereotypes that prevent open discussions about mental health.

41: Read the passage and answer the question.

Amid concerns about declining civic engagement, a group of citizens initiated a project encouraging active participation in community affairs. They organized town hall meetings, volunteer opportunities, and information sessions to foster a sense of community responsibility.

The citizens' project primarily focused on addressing:

- (A) Technological advancements
- (B) Political apathy
- (C) Environmental degradation
- (D) Economic inequality

Correct Answer: (B) Political apathy

Solution:

Step 1: Identifying the key issue in the passage.

1. The project is about increasing civic engagement and encouraging citizens to be more involved in community affairs.
2. This directly addresses political apathy, which means a lack of interest or participation in politics and civic duties.

Quick Tip

"Political apathy" refers to citizens' lack of interest in participating in governance or community decisions.

42: Identify the sentence with the same meaning. She finished her homework and then went to the library.

- (A) Before going to the library, she finished her homework.
- (B) Before she finished her homework, she went to the library.
- (C) After going to the library, she finished her homework.
- (D) She went to the library before finishing her homework.

Correct Answer: (A) Before going to the library, she finished her homework.

Solution:

Step 1: Identifying the correct sequence of events.

1. The original sentence states "She finished her homework first, then went to the library."
2. The best rephrased version of this is "Before going to the library, she finished her homework."

Quick Tip

Use "Before" + past action to indicate something happened first.

43: Identify the sentence with the same meaning. The team won the championship, and then they celebrated at the local restaurant.

- (A) Before celebrating at the local restaurant, the team won the championship.
- (B) The team celebrated at the local restaurant after winning the championship.
- (C) After celebrating at the local restaurant, the team won the championship.

(D) Celebrating at the local restaurant, the team won the championship.

Correct Answer: (B) The team celebrated at the local restaurant after winning the championship.

Solution:

Step 1: Identifying the correct sequence of events.

1. The team won first and celebrated after.
2. The correct transformation is "The team celebrated after winning."

Quick Tip

Use "After" + verb (-ing) to indicate the later action.

44: Identify the sentence with the same meaning. Maria finished her workout, and then she took a refreshing shower.

- (A) Taking a refreshing shower, Maria finished her workout.
- (B) Before taking a refreshing shower, Maria finished her workout.
- (C) Maria took a refreshing shower before finishing her workout.
- (D) After taking a refreshing shower, Maria finished her workout.

Correct Answer: (B) Before taking a refreshing shower, Maria finished her workout.

Solution:

Step 1: Identifying the correct sequence of events.

1. The original sentence states that Maria finished working out first and then took a shower.
2. The best rephrased version is "Before taking a refreshing shower, Maria finished her workout."

Quick Tip

Use "Before" + verb (-ing) to indicate an action happened first.

45: Identify the word that can be substituted for the given words/sentence. The act of giving up one's country or leaving to reside in another.

- (A) Immigration
- (B) Emigration
- (C) Expatriation
- (D) Repatriation

Correct Answer: (B) Emigration

Solution:

Step 1: Understanding the meaning of each term.

1. Immigration refers to entering a new country to live.
2. Emigration refers to leaving one's country to settle elsewhere (correct).
3. Expatriation refers to renouncing citizenship or living abroad permanently.
4. Repatriation refers to returning to one's home country.

Quick Tip

"Emigration" is about leaving a country, while "Immigration" is about entering a new one.

46: Out of four alternatives, choose the one that can be substituted for the given words/sentence.

Leave or remove from a place considered dangerous.

- (A) Evade
- (B) Evacuate
- (C) Avoid

(D) Exterminate

Correct Answer: (B) Evacuate

Solution:

Step 1: Understanding the meaning of each term.

1. Evade means to escape or avoid something.
2. Evacuate means to leave a dangerous place for safety (correct).
3. Avoid means to keep away from something.
4. Exterminate means to destroy completely.

Quick Tip

"Evacuate" is commonly used for emergency situations, such as natural disasters or fires.

47: Choose the word that can be substituted for the given words/sentence.

A state of being unconscious for a long time.

- (A) Coma
- (B) Stupor
- (C) Hibernation
- (D) Dormancy

Correct Answer: (A) Coma

Solution:

Step 1: Understanding the meaning of each term.

1. Coma is a prolonged unconscious state (correct).
2. Stupor is a state of near-unconsciousness but not permanent.
3. Hibernation is a deep sleep in animals.

4. Dormancy refers to inactivity but not unconsciousness.

Quick Tip

A coma is a medical condition where a person remains unconscious for an extended period.

48: Choose the correct option to complete the sentence.

The smell of freshly baked bread wafted

from the bakery, making everyone in the neighborhood hungry.

- (A) through
- (B) along
- (C) by
- (D) from

Correct Answer: (A) through

Solution:

Step 1: Identifying the correct preposition.

1. "Through" is used when something moves within or across a space (correct).
2. "Along" is used when something moves beside a place.
3. "By" indicates proximity, but does not fit the context.
4. "From" does not express movement properly in this sentence.

Quick Tip

Use "through" when something moves within or across a space, like "wind blowing through trees."

49: Identify the correct sentence among the options.

- (A) She don't like to go shopping on weekends.
- (B) Despite of the rain, they decided to go for a hike.
- (C) The movie was so boring, and I can't understand why people like it.
- (D) He plays guitar better than me.

Correct Answer: (D) He plays guitar better than me.

Solution:

Step 1: Checking grammar correctness.

1. (A) Incorrect: "Don't" should be "doesn't" (She doesn't like to go shopping).
2. (B) Incorrect: "Despite of" is incorrect; it should be just "Despite."
3. (C) Incorrect: "Was so boring" and "can't" mix past and present tense incorrectly.
4. (D) Correct: "He plays guitar better than me" is grammatically correct.

Quick Tip

Avoid "despite of"; use "despite" alone. Example: "Despite the rain, we went outside."

50: Identify the sentence with the correct use of punctuation.

- (A) She told him, "I'll be there by 3 pm."
- (B) Despite the storm they decided to go out.
- (C) The teacher said the assignment is due tomorrow.
- (D) Walking in the park, a bird flew overhead.

Correct Answer: (A) She told him, "I'll be there by 3 pm."

Solution:

Step 1: Checking punctuation rules.

1. (A) Correct: Proper use of quotation marks and comma placement.

2. (B) Incorrect: A comma is needed after "storm" → "Despite the storm, they decided to go out."
3. (C) Incorrect: Needs a comma before "the assignment" for clarity.
4. (D) Incorrect: Misplaced modifier. The sentence implies the bird was walking, but it should say "While walking in the park, I saw a bird fly overhead."

Quick Tip

Use quotation marks for direct speech, with a comma before the quote: Example: He said, "I'll call you later."

51: If Alice is currently 30 years old and twice the age her son Ben will be in 5 years, in 10 years, how many times will Alice's age be compared to Ben's?

- (A) 2.5 times
- (B) 1.5 times
- (C) 2 times
- (D) 3 times

Correct Answer: (C) 2 times

Solution:

Step 1: Define the variables.

1. Alice is currently 30 years old.
2. Let Ben's age be x .
3. In 5 years, Ben's age will be $x + 5$.
4. Given that Alice's age is twice Ben's age in 5 years:

$$30 = 2(x + 5)$$

5. Solving for x :

$$30 = 2x + 10$$

$$2x = 20 \Rightarrow x = 10$$

Step 2: Find their ages in 10 years.

1. Alice's age = $30 + 10 = 40$.
2. Ben's age = $10 + 10 = 20$.

Step 3: Find the ratio.

$$\frac{40}{20} = 2$$

Quick Tip

For age problems, always define variables carefully and use equations to compare relationships.

52: A can complete a task in 6 days, B can complete it in 8 days, and C can complete it in 12 days. If they all work together, how many days will be required to complete the task?

- (A) 5 days approx
- (B) 2 days approx
- (C) 4 days approx
- (D) 3 days approx

Correct Answer: (D) 3 days approx

Solution:

Step 1: Find individual work rates.

1. A's rate = $1/6$ per day
2. B's rate = $1/8$ per day

3. C's rate = $\frac{1}{12}$ per day

Step 2: Add their work rates.

$$\frac{1}{6} + \frac{1}{8} + \frac{1}{12}$$

Finding the LCM of 6, 8, and $12 = 24$, we get:

$$\frac{4}{24} + \frac{3}{24} + \frac{2}{24} = \frac{9}{24} = \frac{3}{8}$$

Step 3: Find the total time.

$$\frac{1}{\frac{3}{8}} = \frac{8}{3} \approx 2.67 \text{ days} \approx 3 \text{ days}$$

Quick Tip

When solving work problems, use the formula:

$$\frac{1}{A} + \frac{1}{B} + \frac{1}{C} = \text{Total Work Rate}$$

53: A machine can produce 200 units per hour, while another machine can produce 300 units per hour. How many units will be produced if they operate together for 3 hours?

- (A) 1500
- (B) 1200
- (C) 900
- (D) 1800

Correct Answer: (A) 1500

Solution:

Step 1: Find the total production per hour.

$$200 + 300 = 500 \text{ units per hour}$$

Step 2: Multiply by total hours.

$$500 \times 3 = 1500 \text{ units}$$

Quick Tip

For work rate problems, add rates together and multiply by time.

54: A can do a job in 20 days, B can do it in 30 days, and C can do it in 40 days. If they all work together for 8 days, what fraction of the job remains?

- (A) $\frac{2}{15}$
- (B) $\frac{5}{12}$
- (C) $\frac{13}{15}$
- (D) $\frac{7}{12}$

Correct Answer: (A) $\frac{2}{15}$

Solution:

Step 1: Find individual work rates.

1. A's rate = $\frac{1}{20}$ per day
2. B's rate = $\frac{1}{30}$ per day
3. C's rate = $\frac{1}{40}$ per day

Step 2: Find the total work done in 8 days.

$$\left(\frac{1}{20} + \frac{1}{30} + \frac{1}{40}\right) \times 8$$

Finding LCM = 120,

$$\left(\frac{6}{120} + \frac{4}{120} + \frac{3}{120}\right) \times 8 = \left(\frac{13}{120}\right) \times 8 = \frac{104}{120} = \frac{13}{15}$$

Step 3: Find the fraction remaining.

$$1 - \frac{13}{15} = \frac{2}{15}$$

Quick Tip

To find remaining work, subtract work done from 1.

55: A number divided by 180 gives a remainder of 98. What will the remainder be if the same number is divided by 15?

- (A) 7
- (B) 8
- (C) 9
- (D) 10

Correct Answer: (B) 8

Solution:

Step 1: Represent the given number. Let the number be N :

$$N = 180k + 98$$

Step 2: Find the remainder when divided by 15.

$$98 \div 15 = 6 \text{ remainder } 8$$

Quick Tip

For remainder problems, use modulus division:

$$\text{Remainder} = \text{Given remainder} \mod \text{New divisor}$$

56: How many numbers between 400 and 800 are divisible by 13?

- (A) 30
- (B) 31
- (C) 32
- (D) 33

Correct Answer: (B) 31

Solution:

Step 1: Find the first and last number divisible by 13.

First number: 403 (smallest multiple of 13 \geq 400)

Last number: 799 (largest multiple of 13 \leq 800)

Step 2: Use the formula for counting terms in an arithmetic sequence.

$$n = \frac{\text{Last term} - \text{First term}}{\text{Common difference}} + 1$$
$$n = \frac{799 - 403}{13} + 1 = \frac{396}{13} + 1 = 30 + 1 = 31$$

Quick Tip

To count numbers divisible by a given number N in a range [A, B], use:

$$n = \frac{B - A}{N} + 1$$

57: If three-fifth of a number is 540, find one-sixth of the number.

(A) 200

(B) 250

(C) 100

(D) 150

Correct Answer: (D) 150

Solution:

Step 1: Define the equation. Let the number be x.

$$\frac{3}{5}x = 540$$

Step 2: Solve for x.

$$x = \frac{540 \times 5}{3} = 900$$

Step 3: Find one-sixth of x.

$$\frac{1}{6} \times 900 = 150$$

Quick Tip

For fractional problems, solve for the whole value first, then find the required fraction.

58: If A travels 324 km in 12 hours of driving, what distance will he travel in 5 hours at the same speed?

- (A) 125 km
- (B) 150 km
- (C) 135 km
- (D) 100 km

Correct Answer: (C) 135 km

Solution:

Step 1: Find speed.

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}} = \frac{324}{12} = 27 \text{ km/hr}$$

Step 2: Find distance for 5 hours.

$$\text{Distance} = 27 \times 5 = 135 \text{ km}$$

Quick Tip

Use the Speed = Distance / Time formula for solving motion-related problems.

59: A vessel contains 24 litres of milk and water in the ratio 5:3. How much water should be added so that the ratio becomes 1:1?

- (A) 5
- (B) 4

(C) 6

(D) 8

Correct Answer: (C) 6

Solution:

Step 1: Find the quantity of milk and water. Total liquid = 24 litres

$$\text{Milk} = \frac{5}{8} \times 24 = 15 \text{ litres}$$

$$\text{Water} = \frac{3}{8} \times 24 = 9 \text{ litres}$$

Step 2: Find extra water needed for a 1:1 ratio. Let x litres be added.

$$\frac{15}{9 + x} = 1$$

$$15 = 9 + x$$

$$x = 6 \text{ litres}$$

Quick Tip

When changing ratios, convert them into fractions and use algebra to find unknowns.

60: The ages of Jack and Jill are in the ratio 5:4. What will be the ratio of their ages after 6 years if Jack is now elder to Jill by 4 years?

(A) 13:11

(B) 12:11

(C) 11:10

(D) 10:9

Correct Answer: (A) 13:11

Solution:

Step 1: Define variables. Let Jack's and Jill's ages be $5x$ and $4x$, respectively.

$$\text{Given } 5x - 4x = 4$$

$$x = 4$$

Step 2: Find their current ages.

$$\text{Jack's age} = 5 \times 4 = 20 \text{ years}$$

$$\text{Jill's age} = 4 \times 4 = 16 \text{ years}$$

Step 3: Find their ages after 6 years.

$$\text{Jack's future age} = 20 + 6 = 26$$

$$\text{Jill's future age} = 16 + 6 = 22$$

Step 4: Find new ratio.

$$\frac{26}{22} = \frac{13}{11}$$

Quick Tip

For age ratio problems, define ages in terms of a common variable x and solve for it.

61: The number $2*056$ is divisible by 11. Which is the digit at the * sign?

- (A) 4
- (B) 2
- (C) 3
- (D) 5

Correct Answer: (C) 3

Solution:

Step 1: Apply the divisibility rule of 11. A number is divisible by 11 if:

$$(\text{Sum of odd-positioned digits}) - (\text{Sum of even-positioned digits}) \equiv 0 \pmod{11}$$

For $2*056$:

1. Odd positions: $2, 0, 6 \rightarrow 2 + 0 + 6 = 8$

2. Even positions: $*, 5 \rightarrow * + 5$

Equation:

$$8 - (* + 5) \equiv 0 \pmod{11}$$

$$8 - * - 5 = 3 - * \equiv 0 \pmod{11}$$

$$* = 3$$

Quick Tip

The divisibility rule of 11:

(Sum of odd-positioned digits) – (Sum of even-positioned digits) = 0 or multiple of 11.

62: How many times should the keys of the keyboard be pressed to enter the first 300 counting numbers?

(A) 795

(B) 889

(C) 788

(D) 792

Correct Answer: (D) 792

Solution:

Step 1: Count the digits used for each range.

1. 1 to 9 \rightarrow 9 numbers $\rightarrow 9 \times 1 = 9$ digits

2. 10 to 99 \rightarrow 90 numbers $\rightarrow 90 \times 2 = 180$ digits

3. 100 to 299 \rightarrow 200 numbers $\rightarrow 200 \times 3 = 600$ digits

$$9 + 180 + 600 = 792$$

Quick Tip

For digit counting problems, break them into ranges based on number of digits per place value.

63: Which of the following numbers is exactly divisible by 4, 5, 6, and 7?

- (A) 1260
- (B) 1340
- (C) 1080
- (D) 1400

Correct Answer: (A) 1260

Solution:

Step 1: Find the LCM of 4, 5, 6, and 7.

$$\text{LCM}(4, 5, 6, 7) = \text{LCM}(2^2, 5, 2 \times 3, 7) = 420$$

Step 2: Find the multiple of 420 in the given options.

$$1260 \div 420 = 3 \quad (\text{Divisible})$$

$$1340 \div 420 \neq \text{Integer}$$

$$1080 \div 420 \neq \text{Integer}$$

$$1400 \div 420 \neq \text{Integer}$$

Quick Tip

To check divisibility by multiple numbers, find the LCM and check which option is a multiple of LCM.

64: Five alarms sound together at intervals of 5, 10, 15, 20, and 25 minutes respectively. At most, how many times will they all sound together in 2 hours?

- (A) 1
- (B) 2
- (C) 3
- (D) 0

Correct Answer: (D) 0

Solution:

Step 1: Find the LCM of 5, 10, 15, 20, and 25.

$$\text{LCM}(5, 10, 15, 20, 25) = 300 \text{ minutes} = 5 \text{ hours}$$

Step 2: Determine occurrences in 2 hours.

$$\frac{120}{300} = 0.4$$

Since it does not reach 1 complete cycle, the answer is 0.

Quick Tip

For LCM-based time problems, divide total time by LCM interval to count occurrences.

65: What fraction of 1 km is 400m?

- (A) $\frac{1}{4}$
- (B) $\frac{2}{5}$
- (C) $\frac{1}{3}$
- (D) $\frac{1}{2}$

Correct Answer: (B) $\frac{2}{5}$

Solution:

Step 1: Convert km to meters.

$$1 \text{ km} = 1000 \text{ m}$$

Step 2: Find fraction of 400m.

$$\frac{400}{1000} = \frac{2}{5}$$

Quick Tip

For fraction problems, divide the given value by the total reference value and simplify.

66: The incomes of A and B are in the ratio 3:2 and their expenses are in the ratio 5:3. If each saves Rs. 700,000, what is the income of A?

- (A) Rs. 40 lakh
- (B) Rs. 45 lakh
- (C) Rs. 42 lakh
- (D) Rs. 35 lakh

Correct Answer: (C) Rs. 42 lakh

Solution:

Let A's income be $3x$ and B's income be $2x$. Let A's expenses be $5y$ and B's expenses be $3y$.
Given that savings for both are Rs. 700,000:

$$3x - 5y = 700,000$$

$$2x - 3y = 700,000$$

Solving for x and y , we get:

$$x = 14 \text{ lakh}, \quad y = 7 \text{ lakh}$$

A's income:

$$3x = 3 \times 14 = 42 \text{ lakh}$$

Quick Tip

For income-expense ratio problems, use the savings formula:

$$\text{Income} - \text{Expense} = \text{Savings}$$

67: If 15 men do a work in 9 days, 5 men can do the same work in how many days?

- (A) 3 days
- (B) 45 days
- (C) 27 days
- (D) 30 days

Correct Answer: (C) 27 days

Solution:

Step 1: Use the inverse proportion formula.

$$\text{Work} \propto \frac{1}{\text{Workers}}$$

Step 2: Calculate required days.

$$\text{Total Work} = 15 \times 9 = 135 \text{ man-days}$$

$$\text{Days for 5 men} = \frac{135}{5} = 27 \text{ days}$$

Quick Tip

For work problems, use:

$$\text{Men} \times \text{Days} = \text{Constant Work}$$

68: Determine the compound interest on Rs. 6 lakh for one year at 8% p.a. interest compounded half-yearly.

- (A) 48000
- (B) 48600
- (C) 48860
- (D) 48960

Correct Answer: (D) 48960

Solution:

Step 1: Use compound interest formula.

$$A = P \left(1 + \frac{r}{2 \times 100} \right)^{2t}$$

Step 2: Plug in values.

$$A = 600000 \left(1 + \frac{8}{200} \right)^2$$

$$A = 600000 \times (1.04)^2$$

$$A = 600000 \times 1.0816 = 648960$$

Step 3: Find interest.

$$CI = A - P = 648960 - 600000 = 48960$$

Quick Tip

For compound interest, use:

$$A = P \left(1 + \frac{r}{n \times 100} \right)^{nt}$$

where n = times compounded per year.

69: A train running at a speed of 72 kmph passes a telegraphic pole in 8 seconds. How much time will it take to cross a bridge of 180m?

- (A) 9 seconds
- (B) 17 seconds
- (C) 8 seconds

(D) 15 seconds

Correct Answer: (B) 17 seconds

Solution:

Step 1: Convert speed to m/s.

$$72 \times \frac{5}{18} = 20 \text{ m/s}$$

Step 2: Find train length.

$$\text{Train Length} = \text{Speed} \times \text{Time} = 20 \times 8 = 160 \text{ m}$$

Step 3: Calculate time to cross a 180m bridge.

$$\text{Total distance} = 160 + 180 = 340 \text{ m}$$

$$\text{Time} = \frac{340}{20} = 17 \text{ seconds}$$

Quick Tip

For train problems, find train length first, then use:

$$\text{Time} = \frac{\text{Total distance}}{\text{Speed}}$$

70: Two trains start at 10 am from two stations and travel towards each other at speeds 40 kmph and 60 kmph. If the two stations are 400 km apart, when will they meet?

(A) 1 pm

(B) 12 noon

(C) 2 pm

(D) 1:30 pm

Correct Answer: (C) 2 pm

Solution:

Step 1: Find relative speed.

$$\text{Relative Speed} = 40 + 60 = 100 \text{ kmph}$$

Step 2: Find time to meet.

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{400}{100} = 4 \text{ hours}$$

Step 3: Find meeting time.

$$10 \text{ am} + 4 \text{ hours} = 2 \text{ pm}$$

Quick Tip

For opposite direction motion, add speeds:

$$\text{Time} = \frac{\text{Distance}}{\text{Relative Speed}}$$

71: A person walks a certain distance and cycles back, taking a total time of 90 minutes. He could walk both ways in 120 minutes. How long will it take for him to ride both ways?

- (A) 45 minutes
- (B) 75 minutes
- (C) 40 minutes
- (D) 60 minutes

Correct Answer: (D) 60 minutes

Solution:

Step 1: Define variables. Let W be the walking time one way and C be the cycling time one way.

$$W + C = 90/2 = 45$$

$$2W = 120 \Rightarrow W = 60$$

Step 2: Solve for cycling time.

$$C = 45 - 60 = 30$$

Step 3: Find the total cycling time.

$$2C = 2 \times 30 = 60 \text{ minutes}$$

Quick Tip

For time and distance problems, break total time into separate components for each mode of travel.

72: John sold a product for 15% profit. If he had sold it for Rs. 600 more, he would have made 25% profit. What is the cost price of the product?

- (A) Rs. 6000
- (B) Rs. 3000
- (C) Rs. 5000
- (D) Rs. 4500

Correct Answer: (A) Rs. 6000

Solution:

Let the cost price be Rs. x . Selling price at 15% profit:

$$1.15x$$

Selling price at 25% profit:

$$1.25x$$

Given:

$$1.25x - 1.15x = 600$$

Solving for x :

$$0.10x = 600$$

$$x = 6000$$

Quick Tip

For profit problems, use:

$$\text{Selling Price} = \text{Cost Price} \times \left(1 + \frac{\text{Profit \%}}{100}\right)$$

73: What was the original price of a product sold for Rs. 1200 if the seller gave a discount of 25%?

- (A) Rs. 1500
- (B) Rs. 2500
- (C) Rs. 900
- (D) Rs. 1600

Correct Answer: (D) Rs. 1600

Solution:

Let the original price be x . Since there was a 25% discount, the selling price is:

$$\text{Selling Price} = x - 25\% \text{ of } x$$

$$= x \times \left(1 - \frac{25}{100}\right)$$

$$= x \times 0.75$$

$$1200 = 0.75x$$

$$x = \frac{1200}{0.75} = 1600$$

Quick Tip

For discount problems, use:

$$\text{Discounted Price} = \text{Original Price} \times \left(1 - \frac{\text{Discount \%}}{100}\right)$$

74: The value of equipment is Rs. 1 crore. If depreciation is calculated at 10% annually using the written-down value method, what will be the value after 3 years?

- (A) Rs. 72.9 lakh
- (B) Rs. 70 lakh
- (C) Rs. 65.7 lakh
- (D) Rs. 75.6 lakh

Correct Answer: (A) Rs. 72.9 lakh

Solution:

Step 1: Use the depreciation formula:

$$A = P \times \left(1 - \frac{r}{100}\right)^t$$

Step 2: Plug in values.

$$A = 1,00,00,000 \times \left(1 - \frac{10}{100}\right)^3$$

$$A = 1,00,00,000 \times (0.9)^3$$

$$A = 1,00,00,000 \times 0.729 = 72,90,000$$

Quick Tip

For depreciation, use:

$$A = P \times (1 - r/100)^t$$

where r = depreciation rate and t = years.

75: A number is doubled and 9 is added. If the resultant is trebled, it becomes 75. What is that number?

- (A) 6
- (B) 8
- (C) -3.5
- (D) None of these

Correct Answer: (B) 8

Solution:

Step 1: Define the equation. Let the number be x .

$$\text{Resultant} = (2x + 9) \times 3 = 75$$

Step 2: Solve for x .

$$6x + 27 = 75$$

$$6x = 48$$

$$x = 8$$

Quick Tip

For algebraic problems, translate words into equations and solve step-by-step.

76: When 25 is subtracted from 50% of a number, the result is 25. Find the number.

- (A) 75
- (B) 100

(C) 50

(D) 60

Correct Answer: (B) 100

Solution:

Let the number be x .

$$\frac{50}{100}x - 25 = 25$$

$$\frac{x}{2} = 50$$

$$x = 100$$

Quick Tip

For percentage problems, convert percentages to fractions and solve step by step.

77: If the price of a product is first increased by 20% and then by 10%, what is the total increase?

(A) 30%

(B) 31%

(C) 32%

(D) 33%

Correct Answer: (C) 32%

Solution:

Using successive percentage formula:

$$\text{Total increase} = A + B + \frac{A \times B}{100}$$

Substituting values:

$$= 20 + 10 + \frac{20 \times 10}{100}$$

$$= 20 + 10 + 2 = 32\%$$

Quick Tip

For successive percentage changes, use:

$$\text{Total Change} = A + B + \frac{A \times B}{100}$$

78: A factory can produce 1000 units per day, while another factory can produce 1500 units per day. If they work together for 2 days, what fraction will be left if the total production required is 15000 units?

(A) $\frac{1}{3}$

(B) $\frac{2}{3}$

(C) $\frac{1}{5}$

(D) $\frac{2}{5}$

Correct Answer: (B) $\frac{2}{3}$

Solution:

Step 1: Find total production in 2 days.

$$(1000 + 1500) \times 2 = 5000 \text{ units}$$

Step 2: Find fraction remaining.

$$\frac{15000 - 5000}{15000} = \frac{10000}{15000} = \frac{2}{3}$$

Quick Tip

To find remaining work, use:

$$\frac{\text{Total Work} - \text{Completed Work}}{\text{Total Work}}$$

79: If A can paint a room in 8 hours and B can paint the same room in 10 hours, how much of the room remains unpainted if they work together for 3 hours?

- (A) $\frac{2}{35}$
(B) $\frac{1}{3}$
(C) $\frac{13}{35}$
(D) $\frac{13}{40}$

Correct Answer: (D) $\frac{13}{40}$

Solution:

Step 1: Find work rates.

$$\text{A's rate} = \frac{1}{8} \quad \text{B's rate} = \frac{1}{10}$$

Step 2: Find total work done in 3 hours.

$$\left(\frac{1}{8} + \frac{1}{10}\right) \times 3$$

$$\left(\frac{5}{40} + \frac{4}{40}\right) \times 3 = \frac{9}{40} \times 3 = \frac{27}{40}$$

Step 3: Find unpainted fraction.

$$1 - \frac{27}{40} = \frac{13}{40}$$

Quick Tip

For work problems, use:

$$\text{Total Work} = \left(\frac{1}{\text{Time A}} + \frac{1}{\text{Time B}}\right) \times \text{Time Worked}$$

80: A contractor can finish building a house in 60 days, while his assistant can finish it in 90 days. If they work together for 15 days, what fraction of the work is remaining?

- (A) $\frac{5}{12}$

(B) $\frac{7}{12}$

(C) $\frac{2}{3}$

(D) $\frac{1}{2}$

Correct Answer: (B) $\frac{7}{12}$

Solution:

Step 1: Find work rates.

$$\text{Contractor's rate} = \frac{1}{60}, \quad \text{Assistant's rate} = \frac{1}{90}$$

Step 2: Work done in 15 days.

$$\left(\frac{1}{60} + \frac{1}{90}\right) \times 15$$

LCM of 60 and 90 is 180.

$$\left(\frac{3}{180} + \frac{2}{180}\right) \times 15 = \left(\frac{5}{180}\right) \times 15 = \frac{75}{180} = \frac{5}{12}$$

Step 3: Find remaining fraction.

$$1 - \frac{5}{12} = \frac{7}{12}$$

Quick Tip

For work problems, use:

$$\text{Total Work} = \left(\frac{1}{\text{Time A}} + \frac{1}{\text{Time B}}\right) \times \text{Time Worked}$$

Then subtract from 1 to get the remaining fraction.

81: X can complete a project in 12 days and Y can complete it in 18 days. If they work together for 6 days, what fraction of the project remains unfinished?

(A) $\frac{5}{4}$

(B) $\frac{1}{6}$

(C) $\frac{1}{3}$

(D) $\frac{1}{2}$

Correct Answer: (B) $\frac{1}{6}$

Solution:

Step 1: Work rates of X and Y:

$$X's \text{ rate} = \frac{1}{12}, \quad Y's \text{ rate} = \frac{1}{18}$$

Step 2: Total work done in 6 days:

$$\left(\frac{1}{12} + \frac{1}{18} \right) \times 6$$

Finding LCM of 12 and 18 is 36:

$$\left(\frac{3}{36} + \frac{2}{36} \right) \times 6 = \left(\frac{5}{36} \right) \times 6 = \frac{30}{36} = \frac{5}{6}$$

Step 3: Remaining fraction:

$$1 - \frac{5}{6} = \frac{1}{6}$$

Quick Tip

For work problems, use:

$$\text{Work} = \left(\frac{1}{\text{Time A}} + \frac{1}{\text{Time B}} \right) \times \text{Time Worked}$$

82: Sarah's age is now five times that of her nephew Jack. If Jack will be 11 years old in 3 years, how old will Sarah be then?

- (A) 43 years
- (B) 48 years
- (C) 53 years
- (D) 58 years

Correct Answer: (A) 43 years

Solution:

Step 1: Find Jack's current age:

$$\text{Jack's current age} = 11 - 3 = 8$$

Step 2: Find Sarah's current age:

$$\text{Sarah's current age} = 5 \times 8 = 40$$

Step 3: Find Sarah's age in 3 years:

$$40 + 3 = 43$$

Quick Tip

For age problems, always find the current age first, then calculate the future age.

83: If Thomas is currently 20 years old and twice the age of his sister Mary, how old will Mary be in 5 years?

- (A) 10 years
- (B) 15 years
- (C) 20 years
- (D) 25 years

Correct Answer: (B) 15 years

Solution:

Step 1: Find Mary's current age:

$$\text{Mary's current age} = \frac{20}{2} = 10$$

Step 2: Find Mary's age in 5 years:

$$10 + 5 = 15$$

Quick Tip

For age comparison, use the given ratio and solve for the younger person's age.

84: David is currently twice the age of his brother Daniel. If Daniel is 10 years old, how old will David be in 5 years?

- (A) 15 years
- (B) 20 years
- (C) 25 years
- (D) 30 years

Correct Answer: (C) 25 years

Solution:

Step 1: Find David's current age:

$$\text{David's current age} = 2 \times 10 = 20$$

Step 2: Find David's age in 5 years:

$$20 + 5 = 25$$

Quick Tip

When given a multiple age relationship, solve for the current age first, then add future years.

85: Janaki's age is three times that of her daughter Sita. If Sita will be 15 years old in 5 years, how old will Janaki be in 5 years?

- (A) 45 years
- (B) 40 years
- (C) 50 years
- (D) 35 years

Correct Answer: (D) 35 years

Solution:

Step 1: Find Sita's current age:

$$\text{Sita's current age} = 15 - 5 = 10$$

Step 2: Find Janaki's current age:

$$\text{Janaki's current age} = 3 \times 10 = 30$$

Step 3: Find Janaki's age in 5 years:

$$30 + 5 = 35$$

Quick Tip

For parent-child age problems, find the child's current age, multiply by the ratio, and add future years.

86: A printer can complete a printing work in 9 hours, while another printer can do it in 12 hours. If they work together for 4 hours, what fraction of the work will be completed?

(A) $\frac{2}{9}$

(B) $\frac{2}{3}$

(C) $\frac{1}{3}$

(D) $\frac{7}{9}$

Correct Answer: (D) $\frac{7}{9}$

Solution:

Step 1: Work rates of printers.

$$\text{Printer 1 rate} = \frac{1}{9}, \quad \text{Printer 2 rate} = \frac{1}{12}$$

Step 2: Work done in 4 hours.

$$\left(\frac{1}{9} + \frac{1}{12}\right) \times 4$$

Finding LCM of 9 and 12 is 36:

$$\left(\frac{4}{36} + \frac{3}{36}\right) \times 4 = \frac{7}{36} \times 4 = \frac{28}{36} = \frac{7}{9}$$

Quick Tip

For work problems, use:

$$\text{Work} = \left(\frac{1}{\text{Time A}} + \frac{1}{\text{Time B}}\right) \times \text{Time Worked}$$

87: Worker P can complete a task in 10 days, and worker Q can complete the same task in 15 days. If they work together for 5 days, what fraction of the task remains to be done?

(A) $\frac{2}{3}$

(B) $\frac{1}{5}$

(C) $\frac{1}{6}$

(D) $\frac{5}{6}$

Correct Answer: (C) $\frac{1}{6}$

Solution:

Step 1: Work rates of P and Q:

$$\text{P's rate} = \frac{1}{10}, \quad \text{Q's rate} = \frac{1}{15}$$

Step 2: Total work done in 5 days.

$$\left(\frac{1}{10} + \frac{1}{15}\right) \times 5$$

Finding LCM of 10 and 15 is 30:

$$\left(\frac{3}{30} + \frac{2}{30}\right) \times 5 = \frac{5}{30} \times 5 = \frac{25}{30} = \frac{5}{6}$$

Step 3: Remaining fraction:

$$1 - \frac{5}{6} = \frac{1}{6}$$

Quick Tip

When solving fractional work problems, find the total work completed and subtract from 1 to get remaining work.

88: In a class of 150 students, 55 speak English, 85 speak Malayalam and 30 speak neither English nor Malayalam. How many students speak both English and Malayalam?

- (A) 20
- (B) 10
- (C) 120
- (D) 45

Correct Answer: (A) 20

Solution:

Step 1: Find the number of students who speak either language.

$$\text{Students speaking at least one} = 150 - 30 = 120$$

Step 2: Use set formula.

$$\text{Total students speaking English or Malayalam} = (\text{English}) + (\text{Malayalam}) - (\text{Both})$$

$$120 = 55 + 85 - x$$

$$x = 140 - 120 = 20$$

Quick Tip

For Venn diagram problems, use:

$$\text{Total} = A + B - \text{Both} + \text{Neither}$$

89: In a certain class, 40% of students take coffee, 40% take tea, 50% take milk, and 10% take all three. Also, 20% take coffee and tea, 20% take tea and milk, and 20% take coffee and milk. 10 students do not take any of the three. How many students are there in the class?

(A) 100

(B) 90

(C) 50

(D) 40

Correct Answer: (C) 50

Solution:

Using the principle of set inclusion:

Total students = Coffee + Tea + Milk – (Two sets counted twice) + (All three) + (Neither)

$$x = 40 + 40 + 50 - (20 + 20 + 20) + 10 + 10$$

$$x = 50$$

Quick Tip

For overlapping sets, always subtract the double-counted sets and add the intersection.

90: If Jack walks at 4 kmph he reaches the bus stop 10 minutes late. Starting from home at the same time, if he walks at 6 kmph, he reaches the bus stop 5 minutes early. What is the distance he walks to the bus stop?

- (A) 4 km
- (B) 6 km
- (C) 5 km
- (D) 3 km

Correct Answer: (D) 3 km

Solution:

Step 1: Let distance be d and normal time be t .

$$\frac{d}{4} = t + \frac{10}{60}$$

$$\frac{d}{6} = t - \frac{5}{60}$$

Step 2: Solve for d .

Equating both:

$$\frac{d}{4} - \frac{d}{6} = \frac{15}{60}$$

$$\frac{3d - 2d}{12} = \frac{1}{4}$$

$$d = 3 \text{ km}$$

Quick Tip

For time-speed-distance problems, use:

$$\text{Distance} = \text{Speed} \times \text{Time}$$

91: A train covers 400 metres in 40 seconds. What is the speed of the train in kmph?

- (A) 40
- (B) 36
- (C) 50
- (D) 30

Correct Answer: (B) 36

Solution:

Step 1: Convert speed to kmph.

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}} = \frac{400}{40} = 10 \text{ m/s}$$

Step 2: Convert m/s to kmph.

$$\text{Speed} = 10 \times \frac{18}{5} = 36 \text{ kmph}$$

Quick Tip

To convert m/s to kmph, multiply by 18/5.

92: A bus leaves city A at 11:20 am and arrives at city B 240 km away at 4:20 pm on the same day. What is the average speed of the bus for the journey?

- (A) 48 kmph
- (B) 36 kmph
- (C) 50 kmph
- (D) 44 kmph

Correct Answer: (A) 48 kmph

Solution:

Step 1: Find total time taken.

$$\text{Time} = 4 : 20 - 11 : 20 = 5 \text{ hours}$$

Step 2: Find speed.

$$\text{Speed} = \frac{240}{5} = 48 \text{ kmph}$$

Quick Tip

For average speed, use:

$$\text{Speed} = \frac{\text{Total Distance}}{\text{Total Time}}$$

93: A takes half as long as B to do a piece of work. Together they can complete the work in 12 days. How many days will A take if he does the work alone?

- (A) 30
- (B) 36
- (C) 18
- (D) 15

Correct Answer: (C) 18

Solution:

Step 1: Let B take x days. Then A takes $x/2$ days.

Step 2: Work equation.

$$\left(\frac{1}{x/2} + \frac{1}{x} \right) = \frac{1}{12}$$

Step 3: Solve for x .

$$\frac{2}{x} + \frac{1}{x} = \frac{1}{12}$$

$$\frac{3}{x} = \frac{1}{12}$$

$$x = 36, \quad A = \frac{36}{2} = 18$$

Quick Tip

For work problems, express each worker's rate as a fraction of the total work.

94: If the perimeter of a rectangle is 48 cm and its length is twice its breadth, what is its area?

- (A) 130 sq. cm
- (B) 120 sq. cm
- (C) 150 sq. cm
- (D) 128 sq. cm

Correct Answer: (D) 128 sq. cm

Solution:

Step 1: Perimeter formula.

$$2(l + b) = 48$$

Step 2: Solve for length and breadth.

$$l = 2b$$

$$2(2b + b) = 48$$

$$6b = 48 \Rightarrow b = 8, \quad l = 16$$

Step 3: Find area.

$$A = 16 \times 8 = 128 \text{ sq. cm}$$

Quick Tip

For perimeter problems, use:

$$2(l + b) = P$$

95: If the area of a rectangle is 60 sq. cm and its length is 4 cm more than its breadth, what is its perimeter?

(A) 30 cm

(B) 32 cm

(C) 36 cm

(D) 38 cm

Correct Answer: (B) 32 cm

Solution:

Step 1: Let breadth be b .

$$l = b + 4$$

Step 2: Use area equation.

$$(b + 4) \times b = 60$$

$$b^2 + 4b - 60 = 0$$

Step 3: Solve quadratic equation.

$$(b + 10)(b - 6) = 0$$

$$b = 6, \quad l = 10$$

Step 4: Find perimeter.

$$P = 2(l + b) = 2(10 + 6) = 32$$

Quick Tip

For rectangles, use:

$$A = l \times b, \quad P = 2(l + b)$$

96: A certain sum of money becomes Rs. 28,000 in 4 years at 10% simple interest.

What is the principal amount?

- (A) Rs. 20,000
- (B) Rs. 18,000
- (C) Rs. 15,000
- (D) Rs. 16,000

Correct Answer: (A) Rs. 20,000

Solution:

Step 1: Use simple interest formula:

$$A = P + P \times \frac{R \times T}{100}$$

Given:

$$28000 = P + P \times \frac{10 \times 4}{100}$$

Step 2: Solve for P:

$$28000 = P(1 + 0.4) = P \times 1.4$$

$$P = \frac{28000}{1.4} = 20000$$

Quick Tip

For Simple Interest, use:

$$A = P + P \times \frac{R \times T}{100}$$

where A is the amount, P is the principal, R is the rate, and T is time.

97: A company's revenue increased by 25% from last year to this year. If the revenue this year is Rs. 500,000, what was the revenue last year?

(A) Rs. 300,000

(B) Rs. 450,000

(C) Rs. 400,000

(D) Rs. 375,000

Correct Answer: (C) Rs. 400,000

Solution:

Step 1: Let last year's revenue be x .

$$\text{New revenue} = x + 25\% \text{ of } x$$

$$= x \times \left(1 + \frac{25}{100}\right) = x \times 1.25$$

Step 2: Solve for x .

$$500000 = 1.25x$$

$$x = \frac{500000}{1.25} = 400000$$

Quick Tip

For percentage increase, use:

$$\text{New Value} = \text{Old Value} \times \left(1 + \frac{\text{Increase \%}}{100}\right)$$

98: The average of 5 consecutive even numbers is 24. What is the largest of these numbers?

- (A) 30
- (B) 28
- (C) 32
- (D) 26

Correct Answer: (B) 28

Solution:

Step 1: Let the five even numbers be:

$$x - 4, x - 2, x, x + 2, x + 4$$

Step 2: Use the average formula:

$$\frac{(x - 4) + (x - 2) + x + (x + 2) + (x + 4)}{5} = 24$$

$$\frac{5x}{5} = 24 \Rightarrow x = 24$$

Step 3: Largest number:

$$x + 4 = 28$$

Quick Tip

For consecutive numbers, represent them in terms of a variable and solve using the average formula.

99: A bag contains 5 red balls, 4 green balls, and 3 blue balls. If one ball is drawn at random, what is the probability that it is not blue?

- (A) 1/4
- (B) 3/4
- (C) 1/3
- (D) 7/12

Correct Answer: (B) $\frac{3}{4}$

Solution:

Step 1: Find total balls.

$$5 + 4 + 3 = 12$$

Step 2: Probability of not getting blue.

$$\frac{\text{Red} + \text{Green}}{\text{Total}} = \frac{5 + 4}{12} = \frac{9}{12} = \frac{3}{4}$$

Quick Tip

For probability problems, use:

$$P = \frac{\text{Favorable Outcomes}}{\text{Total Outcomes}}$$

100: The sum of two numbers is 35, and their difference is 5. What are the two numbers?

(A) 20, 15

(B) 18, 17

(C) 10, 15

(D) 25, 20

Correct Answer: (A) 20, 15

Solution:

Step 1: Let numbers be x and y .

$$x + y = 35$$

$$x - y = 5$$

Step 2: Solve for x and y .

Adding both equations:

$$2x = 40 \Rightarrow x = 20$$

Substituting in $x + y = 35$:

$$20 + y = 35 \Rightarrow y = 15$$

Quick Tip

For sum and difference problems, use simultaneous equations.

101: If all MBA students are hardworking, and John is hardworking, can we conclude that John is an MBA student?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Cannot be determined

Correct Answer: (B) No

Solution:

The given statement says that all MBA students are hardworking. This means that every MBA student belongs to the hardworking category.

However, it does **not** state that **only** MBA students are hardworking. John could be hardworking without being an MBA student.

Thus, we cannot conclude that John is an MBA student.

Quick Tip

For syllogism-based questions, ensure that the logic follows the correct direction. A statement about all A being B does not mean all B are A.

102: If some managers are leaders and all leaders are good decision-makers, can we infer that some managers are good decision-makers?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Insufficient information

Correct Answer: (A) Yes

Solution:

- Given: - Some managers are leaders. - All leaders are good decision-makers.

By deductive reasoning, the managers who are also leaders will be good decision-makers. Since we know that some managers are leaders, it follows that some managers are good decision-makers.

Quick Tip

When two logical statements connect through a middle term, transitive logic applies.

If $A \rightarrow B$ and $B \rightarrow C$, then $A \rightarrow C$.

103: If A is twice as old as B, and C is half the age of A, how many times older is A compared to C?

- (A) 4 times
- (B) 2 times
- (C) 1.5 times
- (D) 3 times

Correct Answer: (B) 2 times

Solution:

Step 1: Let B's age be x .

$$A = 2x$$

$$C = \frac{A}{2} = \frac{2x}{2} = x$$

Step 2: Find the ratio of A's age to C's.

$$\frac{A}{C} = \frac{2x}{x} = 2$$

Thus, A is 2 times older than C.

Quick Tip

For age-based ratio problems, express each person's age in terms of a variable and simplify the ratios.

104: If all finance majors are good at math, and some good-at-math people are not finance majors, can we conclude that all finance majors are good at math?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Cannot be determined

Correct Answer: (A) Yes

Solution:

The statement says: - **All finance majors** → **Good at math**. - **Some good-at-math people** are **not finance majors** (irrelevant for our conclusion).

The first statement alone is sufficient to conclude that every finance major is good at math.

The second statement does not contradict this.

Thus, the answer is Yes.

Quick Tip

For logical deductions, focus only on necessary premises and ignore irrelevant statements.

105: If no athletes are doctors, and some doctors are musicians, can we infer that no athletes are musicians?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Insufficient information

Correct Answer: (B) No

Solution:

- Statement 1: No athletes are doctors ($A \cap D = \emptyset$). - Statement 2: Some doctors are musicians ($D \cap M \neq \emptyset$). - We need to check if $A \cap M = \emptyset$ (no athletes are musicians).

Since no connection is provided between athletes and musicians, we **cannot conclude** that no athletes are musicians.

Thus, the answer is No.

Quick Tip

For Venn diagram logic, if two sets are unrelated, no conclusion can be drawn about their interaction.

106: If every student who studies hard gets good grades, and Mary gets good grades, can we conclude that Mary studied hard?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Cannot be determined

Correct Answer: (D) Cannot be determined

Solution:

The given statement tells us that every student who studies hard gets good grades, but it does not specify that only students who study hard get good grades. Therefore, Mary could have gotten good grades by some other means, and we cannot definitively conclude that Mary studied hard.

Quick Tip

In logical reasoning, when a statement implies a condition but does not limit it exclusively, we cannot assume the reverse unless specified.

107: If no artists are scientists, and some scientists are writers, can we infer that no artists are writers?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Insufficient information

Correct Answer: (B) No

Solution:

The statement says no artists are scientists, and some scientists are writers.

There is no direct connection provided between artists and writers. Therefore, we cannot conclude that no artists are writers.

Quick Tip

For syllogistic reasoning, ensure you establish relationships between the terms before drawing conclusions.

108: If the average age of a group of 5 people is 30 years, and one person leaves the group, what is the new average age?

- (A) 28 years
- (B) 30 years
- (C) 32 years
- (D) Insufficient information

Correct Answer: (D) Insufficient information

Solution:

We know that the average age of the group is 30 years and there are 5 people in the group. This gives us the total age of the group:

$$\text{Total Age} = 30 \times 5 = 150 \text{ years}$$

However, without knowing the age of the person who leaves, we cannot determine the new average age.

Quick Tip

To calculate new averages, you need to know the value that is being removed or added.

109: If 60% of students in a class are female, and 40% of the females wear glasses, what percentage of the class wears glasses?

- (A) 60%
- (B) 40%
- (C) 24%
- (D) 36%

Correct Answer: (C) 24%

Solution:

Given: - 60% of the class are female. - 40% of the females wear glasses.

Thus, the percentage of the entire class that wears glasses is:

$$60\% \times 40\% = 24\%$$

Quick Tip

For percentage of a percentage, multiply the two percentages.

110: If some graduates are employed and all employed people are financially stable, can we infer that some graduates are financially stable?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Insufficient information

Correct Answer: (A) Yes

Solution:

The statement tells us: - Some graduates are employed. - All employed people are financially stable.

Since some graduates are employed, and all employed people are financially stable, those employed graduates must be financially stable.

Quick Tip

In logical reasoning, if a group has a property, then any subset of that group will also have that property.

111: If all leaders are good communicators, and some good communicators are not leaders, can we conclude that some leaders are not good communicators?

- (A) Yes

- (B) No
- (C) Maybe
- (D) Insufficient information

Correct Answer: (B) No

Solution:

The statement says: - All leaders are good communicators. - Some good communicators are not leaders.

We cannot conclude that some leaders are not good communicators because all leaders are good communicators by definition. The second statement is about some good communicators, which does not affect the leaders.

Quick Tip

If a group is entirely contained within another, no contradiction can occur.

112: If 20% of a company's employees are managers, and 10% of the managers are also team leaders, what percentage of the employees are both managers and team leaders?

- (A) 10%
- (B) 2%
- (C) 20%
- (D) 0.2%

Correct Answer: (B) 2%

Solution:

Given: - 20% of the employees are managers. - 10% of the managers are also team leaders. To find the percentage of employees who are both managers and team leaders, multiply the two percentages:

$$\text{Both Managers and Team Leaders} = 20\% \times 10\% = 2\%$$

Quick Tip

For percentage of a percentage, multiply the two percentages:

$$\text{Result} = \text{First Percentage} \times \text{Second Percentage}$$

113: If every successful entrepreneur is innovative, and John is innovative, can we conclude that John is a successful entrepreneur?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Insufficient information

Correct Answer: (C) Maybe

Solution:

The statement says that every successful entrepreneur is innovative, but it does not say that only successful entrepreneurs are innovative.

Since John is innovative, we cannot conclusively say that John is a successful entrepreneur.

Quick Tip

When "every" is mentioned, it indicates a one-way relationship. Ensure no opposite relationship is implied unless specified.

114: If all MBA students are ambitious, and some ambitious people are not MBA students, can we infer that some MBA students are not ambitious?

- (A) Yes
- (B) No
- (C) Maybe

(D) Insufficient information

Correct Answer: (B) No

Solution:

The statement says: - All MBA students are ambitious. - Some ambitious people are not MBA students.

Since all MBA students are already ambitious, we cannot infer that any MBA student is not ambitious.

Quick Tip

For statements involving "all", ensure that the group is fully contained within the other group before drawing conclusions.

115: If some employees are satisfied with their jobs, and all satisfied employees are productive, can we infer that some employees are productive?

(A) Yes

(B) No

(C) Maybe

(D) Insufficient information

Correct Answer: (A) Yes

Solution:

Given: - Some employees are satisfied with their jobs. - All satisfied employees are productive.

Since some employees are satisfied, and all satisfied employees are productive, it follows that some employees are productive.

Quick Tip

For logical deductions, use the transitive property if applicable:

If $A \rightarrow B$ and $B \rightarrow C$, then $A \rightarrow C$.

116: If no graduates are unemployed, and some unemployed people are not graduates, can we conclude that some graduates are employed?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Insufficient information

Correct Answer: (D) Insufficient information

Solution:

The given statement tells us: - No graduates are unemployed: This means all graduates are employed. - Some unemployed people are not graduates: This statement doesn't provide any information about the graduates specifically.

Since we don't know if any graduates are unemployed or employed, we cannot conclude with certainty that some graduates are employed.

Quick Tip

For logical inferences, check if the provided information directly applies to the group in question.

117: If all leaders are strategic thinkers, and some strategic thinkers are not leaders, can we infer that some leaders are not strategic thinkers?

- (A) Yes
- (B) No

(C) Maybe

(D) Insufficient information

Correct Answer: (B) No

Solution:

Given: - All leaders are strategic thinkers: Every leader is a strategic thinker. - Some strategic thinkers are not leaders: This means there are strategic thinkers who are not leaders. Since all leaders are already strategic thinkers, the second statement does not affect the first. We cannot conclude that some leaders are not strategic thinkers.

Quick Tip

In syllogisms, if the relationship is fully defined for one group, avoid inferring anything contradictory unless explicitly stated.

118: If 25% of students like math, and 60% of those who like math also like science, what percentage of students like both math and science?

(A) 15%

(B) 25%

(C) 60%

(D) 75%

Correct Answer: (A) 15%

Solution:

- 25% of students like math. - 60% of those who like math also like science.

Thus, the percentage of students who like both math and science is:

$$\text{Percentage of students who like both} = 25\% \times 60\% = 15\%$$

Quick Tip

For percentage of a percentage, simply multiply the two percentages:

$$\text{Result} = \text{First Percentage} \times \text{Second Percentage}$$

119: If every candidate who completes the training program gets a job, and Tom got a job, can we conclude that Tom completed the training program?

- (A) Yes
- (B) No
- (C) Maybe
- (D) Insufficient information

Correct Answer: (C) Maybe

Solution:

The statement says: - Every candidate who completes the training program gets a job. - Tom got a job.

This implies Tom could have completed the training program, but there is no information that explicitly confirms this. Tom could have gotten the job through other means.

Quick Tip

For if-then statements, be cautious about inferring the reverse unless explicitly stated.

120: If no scholars are athletes, and some athletes are musicians, can we infer that no scholars are musicians?

- (A) Yes
- (B) No
- (C) Maybe

(D) Insufficient information

Correct Answer: (B) No

Solution:

We are told: - No scholars are athletes. - Some athletes are musicians.

However, there is no direct relationship provided between scholars and musicians. Since no connection is made between scholars and musicians, we cannot infer that no scholars are musicians.

Quick Tip

In logical deductions, ensure you have sufficient relationships between all involved terms before making conclusions.

121: In the question below, a statement is given, followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement. Statement: All students in the class passed the exam. Conclusions: I. Every student is good at academics. II. No student failed the exam.

(A) If only conclusion I follows

(B) If only conclusion II follows

(C) If either I or II follows

(D) If neither I nor II follows

Correct Answer: (B) If only conclusion II follows

Solution:

From the statement, we know all students passed the exam. Conclusion II, which states no student failed the exam, logically follows from this. However, conclusion I, which states that every student is good at academics, cannot be inferred because passing an exam does not imply being good at academics.

Quick Tip

In logical reasoning, ensure that conclusions can be directly derived from the statement without assumptions or generalizations.

122: In the question below, a statement is given followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement. **Statement:** The train arrived late at the station. **Conclusions:** I. The train schedule was disrupted. II. Passengers were unhappy with the delay.

- (A) If only conclusion I follows
- (B) If only conclusion II follows
- (C) If either I or II follows
- (D) If neither I nor II follows

Correct Answer: (A) If only conclusion I follows

Solution:

From the statement, we know the train was late, which logically leads to the conclusion that the train schedule was disrupted (Conclusion I). However, Conclusion II, stating that passengers were unhappy with the delay, is an assumption and cannot be directly concluded from the statement.

Quick Tip

For logical deductions, avoid assuming or inferring beyond the given statement.

123: In the question below, a statement is given, followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the

two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement. Statement: All actors are trained in performing arts. Conclusions: I. Every person trained in performing arts is an actor. II. Some actors may not be trained in performing arts.

- (A) If only conclusion I follows
- (B) If only conclusion II follows
- (C) If either I or II follows
- (D) If neither I nor II follows

Correct Answer: (D) If neither I nor II follows

Solution:

From the statement, we know all actors are trained in performing arts, but the converse (that every person trained in performing arts is an actor) is not stated or implied. Therefore, Conclusion I is incorrect. Additionally, Conclusion II, which suggests some actors may not be trained in performing arts, contradicts the statement.

Quick Tip

In logical reasoning, ensure that conclusions are strictly derived from the information provided and not assumed from a different perspective.

124: In the question below, a statement is given, followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement. Statement: All students passed the mathematics exam. Conclusions: I. Every student is good at mathematics. II. No student failed the mathematics exam.

- (A) If only conclusion I follows
- (B) If only conclusion II follows

- (C) If either I or II follows
- (D) If neither I nor II follows

Correct Answer: (B) If only conclusion II follows

Solution:

From the statement, we know all students passed the exam, which directly supports Conclusion II: no student failed the exam. However, Conclusion I, which states that every student is good at mathematics, is an assumption and cannot be inferred from the fact that all students passed the exam.

Quick Tip

For logical reasoning, avoid inferring qualities beyond what the statement provides.

125: In the question below, a statement is given, followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement. Statement: The traffic signal is red. Conclusions: I. All vehicles must stop. II. Pedestrians can cross the road.

- (A) If only conclusion I follows
- (B) If only conclusion II follows
- (C) If either I or II follows
- (D) If neither I nor II follows

Correct Answer: (A) If only conclusion I follows

Solution:

The statement tells us that the traffic signal is red, which directly implies that all vehicles must stop (Conclusion I). However, Conclusion II, stating that pedestrians can cross the road, is not necessarily implied by the statement.

Quick Tip

In logical reasoning, check if the conclusions follow directly from the facts in the statement or if they involve assumptions.

126: Question consist of a statement, followed by two arguments numbered I and II. You have to decide which of the arguments is a ‘strong’ argument and which a ‘weak’ argument. Statement: Should the use of plastic be banned worldwide? Arguments: I. Yes. It is essential for environmental conservation and reducing pollution. II. No. It is a versatile material with various applications and banning it would disrupt industries.

- (A) Only argument I is strong.
- (B) Only argument II is strong.
- (C) Either I or II is strong.
- (D) Both I and II are strong.

Correct Answer: (D) Both I and II are strong

Solution:

- Argument I is strong because environmental conservation and pollution control are critical concerns today. - Argument II is also strong because plastic has widespread applications and banning it could lead to economic disruption.

Both arguments are valid in different contexts, so both are strong.

Quick Tip

In logical arguments, evaluate both sides by considering different perspectives before concluding whether an argument is strong or weak.

127: The question consists of a statement and two arguments numbered I and II. You have to decide which of the arguments is a ‘strong’ argument and which a ‘weak’ argument. Statement: Should public transportation be made free in urban areas?

Arguments: I. Yes. It would reduce traffic congestion and pollution. II. No. It would lead to misuse and financial burden on the government.

- (A) Only argument I is strong.
- (B) Only argument II is strong.
- (C) Either I or II is strong.
- (D) Both I and II are strong.

Correct Answer: (D) Both I and II are strong

Solution:

- Argument I is strong because reducing traffic congestion and pollution is an essential step toward sustainable development. - Argument II is also strong as making transportation free might create fiscal pressure on the government and lead to misuse.

Both arguments provide valid considerations.

Quick Tip

When analyzing arguments, always consider the practical implications and long-term effects.

128: The question consists of a statement and two arguments numbered I and II. You have to decide which of the arguments is a ‘strong’ argument and which a ‘weak’ argument. Statement: Should social media platforms have stricter regulations on content to combat misinformation? Arguments: I. Yes. It helps prevent the spread of false information and protects users. II. No. It infringes on freedom of speech and expression.

- (A) Only argument I is strong.
- (B) Only argument II is strong.
- (C) Either I or II is strong.
- (D) Both I and II are strong.

Correct Answer: (A) Only argument I is strong

Solution:

- Argument I is strong as combating misinformation is a significant concern in today's digital age. - Argument II is weak because although freedom of speech is essential, preventing harm through misinformation outweighs unrestricted content.

Quick Tip

When considering regulations on content, evaluate the trade-offs between freedom and public safety.

129: In the question, a statement is given, followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumption(s) is/are implicit in the statement. Statement: The company has decided to launch a new product with advanced features. Assumptions: I. Consumers are always interested in products with advanced features. II. The company has conducted market research to identify consumer preferences.

- (A) If only Assumption I is implicit.
- (B) If only Assumption II is implicit.
- (C) If either Assumption I or II is implicit.
- (D) If neither Assumption I nor II is implicit.

Correct Answer: (C) If either Assumption I or II is implicit

Solution:

- Assumption I is implicit because launching a product with advanced features assumes that consumers value such features. - Assumption II is implicit because companies typically conduct market research before launching a new product. Either assumption could be inferred from the statement.

Quick Tip

For assumptions, check if the statement implies the basis for the decision being made.

130: In the question, a statement is given, followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumption(s) is/are implicit in the statement. Statement: The city administration is implementing a new waste management system. Assumptions: I. The current waste management system is ineffective. II. The residents are willing to cooperate with the new system.

- (A) If only Assumption I is implicit.
- (B) If only Assumption II is implicit.
- (C) If either Assumption I or II is implicit.
- (D) If neither Assumption I nor II is implicit.

Correct Answer: (A) If only Assumption I is implicit

Solution:

- Assumption I is implicit because implementing a new system implies that the current system is ineffective. - Assumption II is not explicitly implied by the statement. The statement does not mention anything about residents' willingness.

Quick Tip

For assumptions, focus on the basis for actions or decisions in the statement.

131: In the question, a statement is given, followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumption(s) is/are implicit in the statement.

Statement: The government has increased the tax rates on luxury goods.

Assumptions: I. The government aims to generate additional revenue through higher taxes.
II. People will reduce their consumption of luxury goods due to increased taxes.

- (A) If only Assumption I is implicit.
- (B) If only Assumption II is implicit.
- (C) If neither Assumption I nor II is implicit.
- (D) If both Assumptions I and II are implicit.

Correct Answer: (A) If only Assumption I is implicit

Solution: - Assumption I is implicit because implementing a new system implies that the government aims to generate more revenue. - Assumption II is not necessarily true, as people may or may not reduce consumption despite higher taxes.

Quick Tip

For assumptions, focus on the basis for actions or decisions in the statement.

132: The question is followed by two statements numbered I and II. You must decide whether the data provided in the statements is sufficient to answer the question.

Question: What is the speed of the train?

Statements: I. The train covers a distance of 300 kilometers in 4 hours. II. The train's average speed during the journey is 75 kilometers per hour.

- (A) If the data in statement I alone is sufficient to determine the answer.
- (B) If the data either in statement I alone or statement II alone are sufficient to determine the answer.
- (C) If the data in both the statements I and II together are insufficient to answer the question.
- (D) If the data in both the statements I and II together are necessary to answer the question.

Correct Answer: (B) If the data either in statement I alone or statement II alone are sufficient to determine the answer.

Solution: - Statement I gives us the total distance and time, so we can calculate the speed as:

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}} = \frac{300}{4} = 75 \text{ km/hr.}$$

- Statement II directly provides the speed. - Since either statement alone is sufficient, option (B) is correct.

Quick Tip

If one statement fully answers the question without needing additional information, it is sufficient.

133: The question is followed by two statements numbered I and II. You must decide whether the data provided in the statements is sufficient to answer the question.

Question: How many employees does Company X have?

Statements: I. Company X has five departments, each with 50 employees. II. Company X's average number of employees per department is 40.

- (A) If the data in statement I alone is sufficient to determine the answer.
- (B) If the data either in statement I alone or statement II alone are sufficient to determine the answer.
- (C) If the data in both the statements I and II together are insufficient to answer the question.
- (D) If the data in both the statements I and II together are necessary to answer the question.

Correct Answer: (A) If the data in statement I alone is sufficient to determine the answer.

Solution: - Statement I provides a direct answer: $5 \times 50 = 250$. - Statement II is insufficient because it doesn't specify the number of departments. - Since statement I alone is sufficient, option (A) is correct.

Quick Tip

When dealing with averages, check if total values are provided for accurate calculation.

134: Each question below consists of a question followed by two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question.

Question: In a group of friends, who is the tallest?

Statements: I. Jack is taller than Sam but shorter than Mark. II. Mark is shorter than Sarah.

- (A) If the data in statement I alone is sufficient to determine the answer.
- (B) If the data either in statement I alone or statement II alone are sufficient to determine the answer.
- (C) If the data in both the statements I and II together are insufficient to answer the question.
- (D) If the data in both the statements I and II together are necessary to answer the question.

Correct Answer: (C) If the data in both the statements I and II together are insufficient to answer the question.

Solution: - Statement I tells us that Mark is taller than Jack and Sam but does not tell us who the tallest is. - Statement II tells us that Mark is shorter than Sarah but does not compare Sarah with others. - Even together, the information is incomplete. - Since we cannot determine the tallest person, option (C) is correct.

Quick Tip

Relative height comparisons need a complete ranking to determine the tallest.

135: Each question below consists of a question followed by two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question.

Question: What is the total number of students in the class?

Statements: I. There are 25 boys in the class. II. The ratio of boys to girls is 2:1.

- (A) If the data in statement I alone is sufficient to determine the answer.
- (B) If the data either in statement I alone or statement II alone are sufficient to determine the answer.

- (C) If the data in both the statements I and II together are insufficient to answer the question.
- (D) If the data in both the statements I and II together are necessary to answer the question.

Correct Answer: (D) If the data in both the statements I and II together are necessary to answer the question.

Solution: - Using both statements:

$$\text{Girls} = \frac{25}{2} = 12.5 \text{ (Not possible)}$$

Since students must be whole numbers, an assumption must be made, making the data insufficient. - Therefore, both statements are necessary but insufficient, so option (D) is correct.

Quick Tip

Ratios must align with actual count values.

136: Each question below consists of a question followed by two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question.

Question: How many siblings does Tom have?

Statements: I. Tom has two sisters. II. Each of Tom's sisters has one brother.

- (A) If the data in statement I alone is sufficient to determine the answer.
- (B) If the data either in statement I alone or statement II alone are sufficient to determine the answer.
- (C) If the data in both the statements I and II together are insufficient to answer the question.
- (D) If the data in both the statements I and II together are necessary to answer the question.

Correct Answer: (D) If the data in both the statements I and II together are necessary to answer the question.

Solution: - Statement I alone tells us that Tom has two sisters but does not confirm whether he has any brothers. - Statement II states that each of Tom's sisters has one brother. However,

we don't know if that brother is Tom or someone else. - Combining both statements, we conclude that Tom is the only brother since both sisters share the same brother. - Since both statements are needed to determine the number of siblings, option (D) is correct.

Quick Tip

For family relationship questions, ensure statements clarify relationships from all perspectives before concluding.

137: If the cost of 5 pens is \$30, what is the price of 8 pens?

- (A) \$40
- (B) \$48
- (C) \$50
- (D) \$64

Correct Answer: (B) \$48

Solution: - The cost of one pen is:

$$\frac{30}{5} = 6$$

- The cost of 8 pens:

$$8 \times 6 = 48$$

- Therefore, the correct answer is (B) \$48.

Quick Tip

For unitary method problems, calculate the cost per unit before finding the required total.

138: What is the probability of drawing a red ball at random if a box contains 12 red balls and 8 green balls?

(A) $\frac{3}{5}$

(B) $\frac{2}{5}$

(C) $\frac{1}{3}$

(D) $\frac{2}{3}$

Correct Answer: (A) $\frac{3}{5}$

Solution: - Total number of balls:

$$12 + 8 = 20$$

- Probability of drawing a red ball:

$$\frac{12}{20} = \frac{3}{5}$$

- Therefore, the correct answer is (A) $\frac{3}{5}$.

Quick Tip

For probability questions, use the formula:

$$P(\text{event}) = \frac{\text{favorable outcomes}}{\text{total outcomes}}$$

139: If the sum of three consecutive odd numbers is 63, what is the largest number?

(A) 21

(B) 23

(C) 25

(D) 27

Correct Answer: (B) 23

Solution: - Let the three consecutive odd numbers be:

$$x, x + 2, x + 4$$

- Their sum is:

$$x + (x + 2) + (x + 4) = 63$$

- Simplifying:

$$3x + 6 = 63$$

$$3x = 57$$

$$x = 19$$

- The largest number is:

$$19 + 4 = 23$$

- Therefore, the correct answer is (B) 23.

Quick Tip

For consecutive number problems, express them as variables (e.g., $x, x + 2, x + 4$) and form an equation.

140: If the average of six numbers is 18, and three of the numbers are 15, 20, and 25, what is the average of the remaining three numbers?

(A) 16

(B) 18

(C) 20

(D) 22

Correct Answer: (A) 16

Solution: - Total sum of all six numbers:

$$6 \times 18 = 108$$

- Sum of the given three numbers:

$$15 + 20 + 25 = 60$$

- Sum of the remaining three numbers:

$$108 - 60 = 48$$

- Average of the remaining three numbers:

$$\frac{48}{3} = 16$$

- Therefore, the correct answer is (A) 16.

Quick Tip

For average problems, use:

$$\text{Total Sum} = \text{Average} \times \text{Total Numbers}$$

Then solve for the unknown values.

141: Who among the following world leaders has the highest number of YouTube followers?

- (A) Rahul Gandhi
- (B) Narendra Modi
- (C) Shashi Tharoor
- (D) Jair Bolsonaro

Correct Answer: (B) Narendra Modi

Solution:

As of recent reports, Indian Prime Minister **Narendra Modi** has the highest number of YouTube subscribers among world leaders. His active social media presence and frequent updates attract a large audience, making him the most-followed political leader on YouTube.

Quick Tip

To find such rankings, refer to official social media analytics reports or leader ranking sites.

142: Which State won the Vijay Hazare Trophy in 2023?

- (A) Rajasthan
- (B) Karnataka
- (C) Haryana
- (D) Tamil Nadu

Correct Answer: (C) Haryana

Solution:

The **Vijay Hazare Trophy** is India's premier domestic one-day cricket tournament. In 2023, **Haryana** emerged as the winner of the tournament. The team showcased remarkable performance throughout the competition, leading them to victory.

Quick Tip

Stay updated with cricket tournaments through official BCCI reports and sports news portals.

143: Which is the safest city in India as per the 2023 report of the National Crime Records Bureau (NCRB)?

- (A) Kolkata
- (B) Chennai
- (C) Coimbatore
- (D) Surat

Correct Answer: (A) Kolkata

Solution:

According to the **2023 NCRB report**, **Kolkata** is ranked as the safest city in India in terms of reported crimes per capita. The city has consistently maintained a lower crime rate compared to other metro cities, making it the safest in the country.

Quick Tip

For safety rankings, refer to official NCRB crime statistics and global safety indexes.

144: Amazonia 1 is an Earth Observation satellite launched by ISRO for which country?

- (A) Brazil
- (B) India
- (C) South Africa
- (D) Argentina

Correct Answer: (A) Brazil

Solution:

The **Amazonia 1** satellite is Brazil's first Earth observation satellite, developed by the National Institute for Space Research (INPE). It was launched by the **Indian Space Research Organisation (ISRO)** aboard the PSLV-C51 rocket on **February 28, 2021**. The satellite helps monitor deforestation in the Amazon region.

Quick Tip

Follow ISRO's official website and press releases for details on satellite launches.

145: Who is the new permanent member of the G20?

- (A) European Union
- (B) NATO

(C) WHO

(D) African Union

Correct Answer: (D) African Union

Solution:

During the **G20 Summit 2023** held in New Delhi, the **African Union (AU)** was granted permanent membership in the **G20**, making it the second regional body after the European Union to join as a full member. This decision was aimed at enhancing Africa's role in global economic discussions.

Quick Tip

To track G20 decisions, check official G20 summit declarations and global economic reports.

146. Who is known as the Father of Cloning?

(A) Ian Wilmut

(B) Keith Campbell

(C) Colin Tudge

(D) Roger Highfield

Correct Answer: (A) Ian Wilmut

Solution:

Ian Wilmut is known as the **Father of Cloning** for his pioneering work in cloning. He led the team that successfully cloned the first mammal, **Dolly the sheep**, in 1996, using a process called somatic cell nuclear transfer (SCNT).

Quick Tip

Cloning involves creating a genetically identical copy of an organism. SCNT is the technique used in cloning mammals.

147. Who inaugurated the 4th National Chilika Birds Festival in 2024?

- (A) Nitish Kumar
- (B) Vishnudeo Sai
- (C) Naveen Patnaik
- (D) Arvind Kejriwal

Correct Answer: (C) Naveen Patnaik

Solution:

The **4th National Chilika Birds Festival** was inaugurated by Odisha Chief Minister Naveen Patnaik in 2024. This festival is organized annually to celebrate the arrival of migratory birds at **Chilika Lake**, the largest brackish water lagoon in India.

Quick Tip

Chilika Lake is a Ramsar site and a major wintering ground for migratory birds in India.

148. What is the interest rate declared by EPFO for the Financial Year 2023-2024?

- (A) 8%
- (B) 8.5%
- (C) 7.5%
- (D) 8.25%

Correct Answer: (D) 8.25%

Solution:

The Employees' Provident Fund Organisation (EPFO) declared an interest rate of 8.25% for the Financial Year 2023-2024. EPFO manages retirement savings for millions of salaried employees in India, and the interest rate is decided annually by the Central Board of Trustees.

Quick Tip

EPFO interest rates are reviewed annually and impact millions of salaried employees in India.

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

- (A) India
- (B) Pakistan
- (C) Nepal
- (D) Singapore

Correct Answer: (D) Singapore

Solution:

The South Asian Association for Regional Cooperation (SAARC) consists of 8 member countries: **India, Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka, Maldives, and Afghanistan.** Singapore is not a member of SAARC as it is part of the ASEAN (Association of Southeast Asian Nations).

Quick Tip

SAARC is a regional organization focused on economic and regional cooperation among South Asian nations.

150. Lakshmisha Tolpadi has been chosen for which of the following prestigious awards in the year 2023?

- (A) Kendra Sahitya Akademi Award
- (B) Sahitya Akademi Translation Prize
- (C) Sangeet Natak Akademi Award

(D) Vyas Samman

Correct Answer: (A) Kendra Sahitya Akademi Award

Solution:

Lakshmisha Tolpadi, a renowned writer and poet, was honored with the Kendra Sahitya Akademi Award in 2023 for his outstanding contribution to literature. This award is one of the highest literary honors in India, recognizing excellence in various languages.

Quick Tip

The Sahitya Akademi Award is given annually by the Government of India for exceptional literary works in 24 languages.

151: Allan Border Trophy is related to which of the following sports?

- (A) Tennis
- (B) Cricket
- (C) Football
- (D) Hockey

Correct Answer: (B) Cricket

Solution: - The Allan Border Trophy is an annual cricket series played between Australia and India. - Therefore, the correct answer is (B) Cricket.

Quick Tip

For sports-related questions, familiarize yourself with major international tournaments and their associated sports.

152: The Indian Railways introduced a Bharat Gaurav Deluxe Tourist Train to showcase the heritage of which state?

- (A) Assam
- (B) Goa
- (C) Gujarat
- (D) Punjab

Correct Answer: (C) Gujarat

Solution: - The Bharat Gaurav Deluxe Tourist Train showcases the rich heritage of Gujarat, including prominent destinations and cultural landmarks. - Therefore, the correct answer is (C) Gujarat.

Quick Tip

For government initiatives, focus on key projects in tourism, infrastructure, and economy-related sectors.

153: Which Article of the Indian Constitution disqualifies MPs from Lok Sabha or Rajya Sabha?

- (A) Article 101
- (B) Article 102
- (C) Article 103
- (D) Article 104

Correct Answer: (B) Article 102

Solution: - Article 102 of the Indian Constitution disqualifies Members of Parliament (MPs) from Lok Sabha or Rajya Sabha on the grounds of offenses or other legal restrictions. - Therefore, the correct answer is (B) Article 102.

Quick Tip

For constitutional articles, focus on important provisions related to governance, elections, and rights.

154: Which institution has been granted a patent for creating and manufacturing a “reusable straw”?

- (A) BSI
- (B) ASI
- (C) Start-up mission
- (D) CCI

Correct Answer: (A) BSI

Solution: - BSI (Bureau of Indian Standards) has been granted a patent for creating and manufacturing a reusable straw. This innovation is part of the effort to reduce single-use plastics. - Therefore, the correct answer is (A) BSI.

Quick Tip

For patents and innovations, stay updated with technological advancements and their related institutions.

155: Which state/UT received a Geographical Indication tag for ‘Sea Buckthorn’?

- (A) Kerala
- (B) Goa
- (C) Ladakh
- (D) Tamil Nadu

Correct Answer: (C) Ladakh

Solution: - Ladakh received the Geographical Indication (GI) tag for Sea Buckthorn, a plant known for its medicinal and nutritional properties. - Therefore, the correct answer is (C) Ladakh.

Quick Tip

For GI tags, focus on agricultural, handicraft, and specialty products unique to specific regions.

156. Which country's Prime Minister was granted the 'Grand Cross of the Order of Honour' by Greece in 2023?

- (A) China
- (B) Bangladesh
- (C) Brazil
- (D) None of the above

Correct Answer: (D) None of the above

Solution:

The Grand Cross of the Order of Honour is one of Greece's highest state honors. In 2023, Indian Prime Minister Narendra Modi received this prestigious award for his contributions to strengthening Greece-India relations.

Quick Tip

This honor is typically awarded to foreign dignitaries for their exceptional contributions to international relations.

157. Which institution implements and administers the Advance Authorization Scheme?

- (A) SEBI
- (B) RBI
- (C) NABARD
- (D) DGFT

Correct Answer: (D) DGFT

Solution:

The Advance Authorization Scheme is implemented by the Directorate General of Foreign Trade (DGFT). It allows duty-free import of raw materials required for manufacturing export goods, promoting Make in India and increasing exports.

Quick Tip

DGFT operates under the Ministry of Commerce and Industry and formulates India's trade policies.

158. Which is the only state in India that produces diamonds?

- (A) West Bengal
- (B) Punjab
- (C) Madhya Pradesh
- (D) Bihar

Correct Answer: (C) Madhya Pradesh

Solution:

Madhya Pradesh is the only state in India with diamond mines, specifically in Panna district. The region is known for producing high-quality diamonds and is managed by the National Mineral Development Corporation (NMDC).

Quick Tip

India was the world's first country to discover and mine diamonds, dating back to ancient times.

159. Which among the following agricultural products is India's main import item?

- (A) Pulses
- (B) Oil seeds
- (C) Edible Oils
- (D) Sugar

Correct Answer: (C) Edible Oils

Solution:

India is the world's largest importer of edible oils, including palm oil, soybean oil, and sunflower oil. Due to low domestic production, India imports edible oils primarily from Indonesia, Malaysia, Argentina, and Brazil.

Quick Tip

India imports 60-70% of its edible oil requirements annually.

160. What is an infrastructure project developed on an empty site?

- (A) Yellow Field Project
- (B) Whitefield Project
- (C) Greenfield Project
- (D) Redfield Project

Correct Answer: (C) Greenfield Project

Solution:

A Greenfield Project refers to an infrastructure project developed on unused land with no prior development. Examples include new highways, airports, and industrial parks.

Quick Tip

The opposite of a Greenfield project is a Brownfield project, which involves upgrading existing infrastructure.

161. What is India's rank in coal production worldwide?

- (A) 3
- (B) 5
- (C) 7
- (D) 2

Correct Answer: (D) 2

Solution:

India is the 2nd largest coal producer in the world, following China. The major coal-producing states in India include Jharkhand, Chhattisgarh, and Odisha.

Quick Tip

India accounts for nearly 10

162. Which of the following is another name for the Hard Disk Drive?

- (A) Winchester Drive
- (B) Thin Film Drive
- (C) SSD
- (D) AMD

Correct Answer: (A) Winchester Drive

Solution:

The term Winchester Drive was an early codename for Hard Disk Drives (HDDs). It originated from IBM's 1973 HDD model, which had 30 MB fixed storage and 30 MB removable storage, similar to the "30-30" Winchester rifle.

Quick Tip

Modern storage devices include HDDs (Hard Disk Drives) and SSDs (Solid State Drives), with SSDs offering faster speeds.

163. The most advanced form of Read-Only Memory (ROM) is:

- (A) Cache Memory
- (B) PROM
- (C) PROME
- (D) EEPROM

Correct Answer: (D) EEPROM

Solution:

EEPROM (Electrically Erasable Programmable Read-Only Memory) is the most advanced type of ROM, as it allows data to be electrically erased and rewritten multiple times, unlike standard ROM or PROM.

Quick Tip

EEPROM is widely used in BIOS firmware and microcontroller programming.

164. Christ the Redeemer's statue is a landmark monument in which country?

- (A) USA
- (B) Canada
- (C) Brazil
- (D) Italy

Correct Answer: (C) Brazil

Solution:

The Christ the Redeemer statue is one of the most famous landmarks in the world. It is located in Rio de Janeiro, Brazil, and stands 98 feet (30 meters) tall. It was completed in 1931 and is considered one of the New Seven Wonders of the World.

Quick Tip

This statue symbolizes peace and Christianity, and is a major tourist attraction in Brazil.

165. Avangkhu is India's first village on the border of which country?

- (A) Pakistan
- (B) China
- (C) Nepal
- (D) Myanmar

Correct Answer: (D) Myanmar

Solution:

Avangkhu is a remote village in Nagaland, India, situated on the India-Myanmar border. It is the first village on this border designated for cross-border trade and connectivity between the two nations.

Quick Tip

The India-Myanmar border stretches 1,643 km, connecting several northeastern states.

166: Which institution introduced the 'Global Greenhouse Gas Monitoring Infrastructure'?

- (A) WHO

- (B) WMO
- (C) IMF
- (D) WEF

Correct Answer: (B) WMO

Solution: - The World Meteorological Organization (WMO) introduced the Global Greenhouse Gas Monitoring Infrastructure, aiming to monitor the concentration of greenhouse gases globally. - Therefore, the correct answer is (B) WMO.

Quick Tip

For environmental initiatives, focus on organizations related to climate change, sustainability, and global cooperation.

167: Kishtwar High Altitude National Park is in which state/UT?

- (A) Jammu and Kashmir
- (B) Sikkim
- (C) Meghalaya
- (D) Assam

Correct Answer: (A) Jammu and Kashmir

Solution: - Kishtwar High Altitude National Park is located in the Jammu and Kashmir region, which is known for its rich biodiversity and mountainous terrain. - Therefore, the correct answer is (A) Jammu and Kashmir.

Quick Tip

For national parks and protected areas, focus on their geographic location and their unique ecosystems.

168: Calcium is required in plants for the formation of which of the following?

- (A) Cell Membrane
- (B) Cell wall
- (C) Chlorophyll
- (D) None of the above

Correct Answer: (B) Cell wall

Solution: - Calcium plays a crucial role in the formation of the cell wall in plants by acting as a secondary messenger in various signaling processes. - Therefore, the correct answer is (B) Cell wall.

Quick Tip

For plant biology questions, focus on the essential elements required for cell structure and function.

169: Which of the following functions is performed by the kidneys in the human body?

- (A) Digestion
- (B) Reproduction
- (C) Excretion
- (D) None of the above

Correct Answer: (C) Excretion

Solution: - The kidneys are responsible for excretion, specifically filtering waste products and excess substances from the bloodstream to form urine. - Therefore, the correct answer is (C) Excretion.

Quick Tip

For human anatomy questions, focus on the functions of major organs and their roles in bodily processes.

170: Which of the following factors affect the Surface Tension?

- (A) Nature of liquid
- (B) Area of Surface
- (C) Both A and B
- (D) None of the above

Correct Answer: (C) Both A and B

Solution: - Both the nature of the liquid and the area of surface affect the surface tension of a liquid. Surface tension is a property that arises due to the cohesive forces between liquid molecules, and this is influenced by the liquid's properties and surface area. - Therefore, the correct answer is (C) Both A and B.

Quick Tip

For physical science questions, review the properties of materials and how they affect various phenomena.

171. The presence of which among the following minerals in Banana makes them slightly radioactive?

- (A) Sodium
- (B) Magnesium
- (C) Potassium
- (D) Protium

Correct Answer: (C) Potassium

Solution:

Bananas contain Potassium-40 (^{40}K), a naturally occurring radioactive isotope of potassium. While the radiation level is extremely low, it is still measurable, making bananas slightly radioactive.

Quick Tip

Potassium-40 is found in many foods, but its radiation is harmless to humans.

172. Who among the following said about Raja Rammohan Roy that he is “the human link between the unfading past and the dawning future”?

- (A) Nandal Chatterjee
- (B) Jayaprakash Narayan
- (C) Abdus Samad Khan
- (D) Dr. Rajendra Prasad

Correct Answer: (A) Nandal Chatterjee

Solution:

Nandal Chatterjee described Raja Rammohan Roy as “the human link between the unfading past and the dawning future” due to his pioneering role in social reforms and modern thinking during the 19th century.

Quick Tip

Raja Rammohan Roy was the founder of the Brahmo Samaj and played a crucial role in the abolition of Sati.

173. Which country has been recently hit by tropical storm Idalia?

- (A) India
- (B) Netherlands

(C) Argentina

(D) Cuba

Correct Answer: (D) Cuba

Solution:

Tropical Storm Idalia impacted Cuba in 2023, bringing heavy rains and flooding before moving towards Florida, USA. It later intensified into a hurricane.

Quick Tip

Hurricanes and tropical storms are named by the World Meteorological Organization (WMO).

174. United Nations Biodiversity has urged people to use which word instead of ‘flora and fauna’?

(A) Wild

(B) Fungi

(C) Alga

(D) Species

Correct Answer: (B) Fungi

Solution:

The United Nations Biodiversity has encouraged the use of the term Fungi to ensure that fungi are recognized as a distinct and essential part of biodiversity, rather than being overshadowed by terms like flora (plants) and fauna (animals).

Quick Tip

Fungi play a crucial role in decomposition, medicine, and food production.

175. Which Indian city is set to launch an innovative disease surveillance dashboard?

- (A) Mumbai
- (B) Indore
- (C) Bhubaneswar
- (D) Bengaluru

Correct Answer: (D) Bengaluru

Solution:

Bengaluru is set to launch an innovative disease surveillance dashboard to monitor and predict outbreaks of infectious diseases. This initiative aims to enhance public health response and prevent the spread of epidemics.

Quick Tip

Disease surveillance dashboards use AI and real-time data to track public health trends.

176: Who is the author of the book "How to Avoid a Climate Disaster"?

- (A) Mark Zuckerberg
- (B) Bill Gates
- (C) Azim Premji
- (D) Steve Jobs

Correct Answer: (B) Bill Gates

Solution: - The author of the book "How to Avoid a Climate Disaster" is Bill Gates. The book discusses various solutions to prevent climate change and reduce carbon emissions. - Therefore, the correct answer is (B) Bill Gates.

Quick Tip

For books and authors, focus on recent publications by well-known figures in relevant fields like technology, environment, or politics.

177: Iodine is obtained from which of the following?

- (A) Brown algae
- (B) Blue algae
- (C) Yellow algae
- (D) White algae

Correct Answer: (A) Brown algae

Solution: - Iodine is obtained primarily from brown algae, which accumulates iodine from seawater. - Therefore, the correct answer is (A) Brown algae.

Quick Tip

For natural resource-based questions, focus on the sources and properties of essential elements or compounds in nature.

178: Where is the National Institute of Hydrology (NIH) located?

- (A) Jaipur
- (B) New Delhi
- (C) Roorkee
- (D) Manali

Correct Answer: (C) Roorkee

Solution: - The National Institute of Hydrology (NIH) is located in Roorkee, which is in the state of Uttarakhand, India. It focuses on research in water resources and related fields. - Therefore, the correct answer is (C) Roorkee.

Quick Tip

For institutions and their locations, focus on specialized institutes related to education, science, and technology.

179: Where was the 12th India-Oman ‘Joint Military Cooperation Committee meeting held?

- (A) Dubai
- (B) Muscat
- (C) Mumbai
- (D) Sharjah

Correct Answer: (B) Muscat

Solution: - The 12th India-Oman Joint Military Cooperation Committee meeting was held in Muscat, the capital of Oman. The meeting focused on strengthening defense ties between the two countries. - Therefore, the correct answer is (B) Muscat.

Quick Tip

For international relations and meetings, keep track of significant bilateral meetings between countries, especially in defense and trade sectors.

180: ‘One Stop Centre scheme’, recently seen in the news, is formulated by which ministry?

- (A) Ministry of Finance
- (B) Ministry of Higher Education
- (C) Ministry of Sports
- (D) Ministry of Women and Child Development

Correct Answer: (D) Ministry of Women and Child Development

Solution: - The 'One Stop Centre scheme' is a government initiative formulated by the Ministry of Women and Child Development. It aims to provide support to women facing violence and other issues. - Therefore, the correct answer is (D) Ministry of Women and Child Development.

Quick Tip

For government schemes, focus on the ministries associated with social welfare, health, and women's empowerment.
