

SET (Symbiosis Entrance Test)

Sample Paper – 3

Duration: 60 Minutes

Maximum Marks: 60

Instructions

- This paper contains **60 Multiple Choice Questions** across 4 sections: General English (16Q), Quantitative Aptitude (16Q), General Awareness (16Q), and Analytical & Logical Reasoning (12Q).
- Each correct answer carries +1 **mark**. There is **no negative marking** for incorrect or unattempted answers.
- Only **one** option is correct per question. Choose carefully.
- Total duration: **60 minutes**. There is **no sectional time limit** — manage your own time across all 4 sections.
- This is an **Online CBT (Computer Based Test)**. An on-screen scratch pad is provided for rough work. Personal calculators, mobile phones, and other electronic gadgets are strictly prohibited.

Part A: General English (Q1–Q16, 1 mark each)

Q1. Choose the word most similar in meaning to **tenacious**.

- (A) weak
- (B) timid
- (C) cautious
- (D) persistent

Q2. Choose the word most **opposite** in meaning to **lucid**.

- (A) clear
- (B) obscure
- (C) vivid
- (D) transparent



Q3. Arrange the following sentences in the most logical order to form a coherent paragraph about the history of the Indian monsoon.

P. The word “monsoon” itself is derived from the Arabic word *mausim*, meaning season.

Q. Ancient Indian civilisations such as the Indus Valley were profoundly shaped by the rhythms of the monsoon.

R. Today, the Indian monsoon is closely monitored by the India Meteorological Department, which issues forecasts critical for agriculture.

S. Over centuries, farmers across the subcontinent developed sophisticated practices to harness monsoon rains for irrigation and crop cultivation.

(A) P, Q, R, S

(B) Q, P, S, R

(C) P, Q, S, R

(D) Q, S, P, R

Q4. Fill in the blank with the most appropriate verb form.

“By the time we arrived, she _____ the assignment.”

(A) had completed

(B) has completed

(C) completed

(D) was completing

Q5. Identify the sentence that uses “**principal**” and “**principle**” correctly.

(A) The principle of the school announced the new schedule during assembly.

(B) She adhered to her principals in every professional decision she made.

(C) The principal issue is that we lack the right principle to solve it here.

(D) The principal of the school emphasized the principle of equality.

Q6. Choose the word that **best** completes the sentence.

“The new drug showed _____ results in early clinical trials.”



- (A) detrimental
- (B) promising
- (C) negligible
- (D) ambiguous

Q7. Read the following passage carefully and answer Q7, Q8, and Q9.

India's economic growth story over the past three decades has been remarkable. The country's GDP has expanded at an average annual rate of approximately 6–7%, making it one of the fastest-growing major economies in the world. The services sector, encompassing information technology, financial services, and telecommunications, has been the primary engine of this growth, contributing more than 50% to national output. India's vast youth population — the so-called “demographic dividend” — offers enormous potential, as a large working-age population can drive consumption, innovation, and productivity. However, the growth story is not without its shadows. Persistent inequality means that the benefits of expansion have not reached all sections of society equally, and unemployment, particularly among educated youth, remains a serious challenge that policymakers must urgently address.

Q7. What is the **main purpose** of the passage?

- (A) To highlight both the achievements and challenges in India's economic journey
- (B) To argue that the services sector is more important than manufacturing
- (C) To explain why India's youth population is a liability rather than an asset
- (D) To criticise government policies on employment and poverty reduction

Q8. (Refer to the passage in Q7.)

According to the passage, which sector is mentioned as the **key driver** of India's economic growth?



- (A) Agriculture
- (B) Manufacturing
- (C) Services sector
- (D) Infrastructure

Q9. (Refer to the passage in Q7.)

What **tone** does the author adopt in the passage?

- (A) Pessimistic and critical
- (B) Enthusiastic and promotional
- (C) Sarcastic and dismissive
- (D) Balanced and objective

Q10. What does the idiom “**make ends meet**” mean?

- (A) To become very wealthy through hard work
- (B) To manage to live within a limited income
- (C) To fail repeatedly at a given task
- (D) To complete all assigned tasks before a deadline

Q11. Choose the **one-word substitution** for: “A system of government in which power is held by a small group of powerful individuals.”

- (A) Oligarchy
- (B) Monarchy
- (C) Democracy
- (D) Theocracy

Q12. Read the following sentence divided into four parts (A), (B), (C), and (D). Identify the part that contains a **grammatical error**.

(A) She is / (B) the most intelligent student / (C) and more better speaker / (D) in the entire class.

- (A) She is
- (B) the most intelligent student



- (C) and more better speaker
- (D) in the entire class

Q13. Arrange the following sentences in the most logical order to form a coherent paragraph about space exploration.

P. The launch of Sputnik in 1957 marked the beginning of the space age.

Q. Today, international space agencies collaborate on missions to explore Mars and beyond.

R. Human curiosity about the cosmos dates back to the earliest civilisations.

S. The Moon landing in 1969 was a defining achievement that inspired generations of scientists.

- (A) P, R, S, Q
- (B) Q, P, S, R
- (C) R, S, P, Q
- (D) R, P, S, Q

Q14. Choose the most appropriate word to fill in the blank.

“Excessive use of social media has been _____ linked to increased levels of anxiety and depression among teenagers, according to several recent studies.”

- (A) consistently
- (B) rarely
- (C) ambiguously
- (D) marginally

Q15. Choose the word that **best** completes the analogy.

Pen : Ink :: Lamp : ?

- (A) Light
- (B) Oil
- (C) Bulb



(D) Wire

Q16. Choose the **most appropriate** modal verb to complete the sentence.

“You _____ consult a doctor if the fever persists.”

- (A) might
- (B) shall
- (C) should
- (D) could

**Part B: Quantitative Apti-
tude (Q17–Q32, 1 mark each)**

Q17. A can complete a piece of work in 20 days, B in 30 days, and C in 60 days. If all three work together, in how many days will the work be completed?

- (A) 15 days
- (B) 12 days
- (C) 10 days
- (D) 8 days

Q18. Pipe A can fill a cistern in 8 hours and Pipe B can drain it in 12 hours. If both pipes are opened simultaneously when the cistern is empty, in how many hours will the cistern be full?

- (A) 24 hours
- (B) 20 hours
- (C) 16 hours
- (D) 18 hours

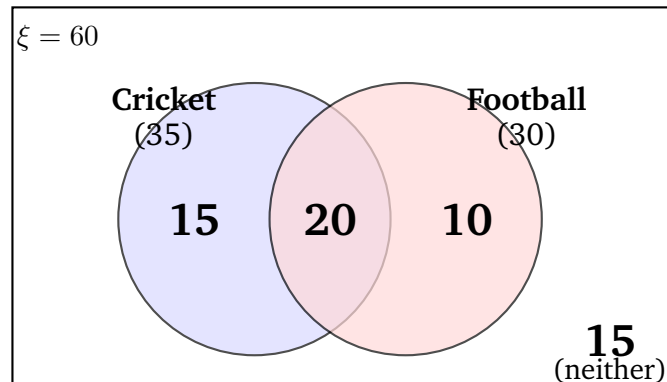
Q19. A card is drawn at random from a standard deck of 52 cards. What is the probability that the card is either a King or a Queen?

- (A) $\frac{1}{13}$
- (B) $\frac{4}{13}$



- (C) $\frac{3}{13}$
(D) $\frac{2}{13}$

Q20. In a class of 60 students, 35 play cricket, 30 play football, and 20 play both. Study the Venn diagram below and answer: how many students play **neither** cricket nor football?



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

Q21. Is $x^2 > x$?

Statement 1: $x > 1$

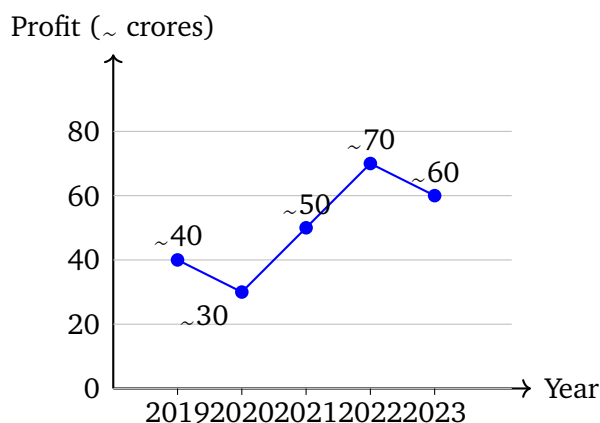
Statement 2: $x < 0$

Which of the following is correct?

- (A) Statement 2 alone is sufficient, but Statement 1 alone is not sufficient.
(B) Both statements together are needed to answer the question.
(C) Statement 1 alone is sufficient, but Statement 2 alone is not sufficient.
(D) Either statement alone is sufficient.

Q22. The line graph below shows a company's annual profit (in **crores of rupees**) from 2019 to 2023.





Q22. In which year was the company's profit the **highest**?

- (A) 2022
- (B) 2023
- (C) 2021
- (D) 2019

Q23. (Refer to the line graph in Q22.)

By how many crores did the profit **increase** from 2020 to 2021?

- (A) ₹10 crores
- (B) ₹15 crores
- (C) ₹25 crores
- (D) ₹20 crores

Q24. A father's age is currently **3 times** his son's age. Twelve years later, the father's age will be **twice** his son's age. What is the son's **current** age?

- (A) 10 years
- (B) 12 years
- (C) 14 years
- (D) 16 years

Q25. A and B invest capital in the ratio **5:3**. A invests for **8 months** and B invests for **12 months**. In what ratio do A and B share the **profit** at the end of the year?



- (A) 5:3
- (B) 2:1
- (C) 10:9
- (D) 4:3

Q26. A train **240 m** long crosses a bridge **360 m** long in **30 seconds**. Find the speed of the train in **km/h**.

- (A) 72 km/h
- (B) 60 km/h
- (C) 80 km/h
- (D) 54 km/h

Q27. A shopkeeper offers two successive discounts of **10%** and **20%** on an article marked at **₹2,000**. What is the **final selling price**?

- (A) ₹1,500
- (B) ₹1,400
- (C) ₹1,600
- (D) ₹1,440

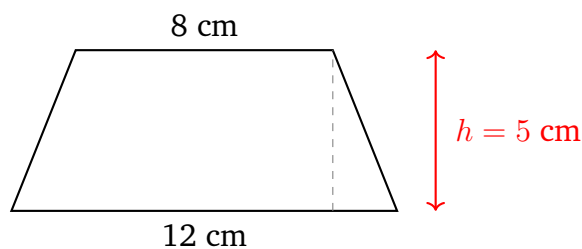
Q28. Solve the following system of equations and find the value of $x + y$:

$$2x + y = 7 \quad \text{and} \quad x - y = 2$$

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

Q29. Find the **area** of the trapezium shown below, whose parallel sides are **8 cm** (top) and **12 cm** (bottom), and whose height is **5 cm**.





- (A) 40 cm^2
- (B) 45 cm^2
- (C) 50 cm^2
- (D) 60 cm^2

Q30. Which of the following is a **prime number**?

- (A) 97
- (B) 91
- (C) 87
- (D) 93

Q31. Find the **compound interest** on a principal of **₹10,000** at a rate of **10% per annum** for **2 years**, compounded annually.

- (A) ₹2,000
- (B) ₹2,050
- (C) ₹1,900
- (D) ₹2,100

Q32. A bag contains **₹5** coins and **₹10** coins. The total number of coins is **120** and the total value is **₹800**. How many **₹5** coins are there in the bag?

- (A) 60
- (B) 80
- (C) 40
- (D) 100

Part C: General Awareness
(Q33–Q48, 1 mark each)



- Q33.** Who was the **first Indian** to win the Nobel Prize in Literature?
- (A) Amartya Sen
 - (B) Rabindranath Tagore
 - (C) V.S. Naipaul
 - (D) Salman Rushdie
- Q34.** The classical dance form **Kathak** is primarily associated with which Indian state?
- (A) Rajasthan
 - (B) Gujarat
 - (C) Maharashtra
 - (D) Uttar Pradesh
- Q35.** What is the approximate **speed of light** in vacuum?
- (A) 3×10^8 m/s
 - (B) 3×10^6 m/s
 - (C) 3×10^{10} m/s
 - (D) 3×10^4 m/s
- Q36.** Which is the **highest peak** entirely within Indian territory?
- (A) K2
 - (B) Mount Everest
 - (C) Kangchenjunga
 - (D) Nanda Devi
- Q37.** Which city hosted the **2024 Summer Olympic Games**?
- (A) Tokyo
 - (B) Paris
 - (C) Los Angeles
 - (D) Brisbane



- Q38.** The **Booker Prize 2023** was awarded for the novel *Prophet Song*. Who is its author?
- (A) Richard Flanagan
 - (B) Anna Burns
 - (C) Douglas Stuart
 - (D) Paul Lynch
- Q39.** In which year was the **Skill India Mission** launched?
- (A) 2015
 - (B) 2016
 - (C) 2017
 - (D) 2014
- Q40.** **NABARD** stands for:
- (A) National Agriculture Business and Rural Development
 - (B) National Agency for Banking and Rural Development
 - (C) National Bank for Agriculture and Rural Development
 - (D) National Association of Banks and Rural Departments
- Q41.** The **First Battle of Panipat** was fought in which year?
- (A) 1556
 - (B) 1526
 - (C) 1761
 - (D) 1498
- Q42.** The **Gaza Strip** is a territory most closely associated with which conflict?
- (A) Lebanese civil war
 - (B) Syrian conflict
 - (C) Yemeni conflict
 - (D) Israeli-Palestinian conflict



- Q43.** The **Directive Principles of State Policy** in the Indian Constitution were primarily inspired by the constitution of which country?
- (A) Ireland
 - (B) USA
 - (C) Canada
 - (D) Australia
- Q44.** The **Unified Payments Interface (UPI)** in India is managed by which organisation?
- (A) RBI
 - (B) SBI
 - (C) NPCI
 - (D) SEBI
- Q45.** **Project Tiger** was launched in India in which year?
- (A) 1970
 - (B) 1973
 - (C) 1980
 - (D) 1985
- Q46.** The **Strait of Malacca** connects which two bodies of water?
- (A) Red Sea and Persian Gulf
 - (B) Bay of Bengal and Arabian Sea
 - (C) South China Sea and Pacific Ocean
 - (D) Andaman Sea and South China Sea
- Q47.** India's rank in the **Tokyo 2020 (held in 2021) Summer Olympics** medal tally was:
- (A) 48th
 - (B) 35th
 - (C) 25th



(D) 67th

Q48. NITI Aayog, established in 2015, replaced which body?

- (A) Finance Commission
- (B) Economic Advisory Council
- (C) Planning Commission
- (D) National Development Council

Part D: Analytical & Logical Reasoning (Q49–Q60, 1 mark each)

Q49. Read the following information carefully and answer Q49.

Six people — Aarav, Bipin, Chanda, Devika, Elan, and Farida — live on six different floors of a building numbered 1 (ground) to 6 (top).

Clue 1: Aarav lives on an even-numbered floor.

Clue 2: Bipin lives immediately below Chanda.

Clue 3: Devika lives on the topmost floor (Floor 6).

Clue 4: Elan does not live on Floor 1 or Floor 2.

Clue 5: Farida lives on Floor 1. Aarav lives on Floor 2.

The arrangement is shown below:

(Top)	
Floor 6	Devika
Floor 5	Elan
Floor 4	Chanda
Floor 3	Bipin
Floor 2	Aarav
Floor 1	Farida
(Ground)	

Q49. Who lives on Floor 4?

- (A) Elan
- (B) Bipin



- (C) Aarav
- (D) Chanda

Q50. Statement: “The water supply in the city was disrupted for 2 days.”

Which of the following is the most likely **effect** of this situation?

- (A) People started rainwater harvesting projects across the city.
- (B) The municipality issued a formal notice to the water board.
- (C) Residents stored and rationed whatever water was available.
- (D) A new water treatment plant was approved by the government.

Q51. Find the **missing term** in the number series:

2, 5, 10, 17, 26, ?

- (A) 35
- (B) 37
- (C) 39
- (D) 33

Q52. A is the **brother** of B. B is the **mother** of C. C is the **son** of D. How is A related to D?

- (A) Brother-in-law
- (B) Uncle
- (C) Father-in-law
- (D) Cousin

Q53. Arrange the following in the **correct logical order** from the **most specific** to the **most general**:

1. Tiger 2. Animal 3. Mammal 4. Carnivore 5. Cat family

- (A) 1, 2, 3, 4, 5
- (B) 5, 4, 1, 3, 2



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

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

Q54. Statement: “A large number of students failed in the annual examination.”

Courses of Action:

I. Extra classes should be organised for weaker students.

II. The question paper should be reviewed to determine whether it was too difficult.

III. All teachers should be penalised for the poor performance.

Which course(s) of action should follow?

(A) Only I

(B) Only II

(C) Both I and II

(D) All three (I, II, and III)

Q55. Find the **missing letter** in the series:

B, E, H, K, ?

(A) L

(B) N

(C) M

(D) O

Q56. Renu is initially facing **North**. She turns **90° clockwise**, then **180° anticlockwise**, then **90° clockwise** again. In which direction is she **now** facing?

(A) North

(B) South

(C) East



(D) West

Q57. Five friends A, B, C, D, and E have different heights.

- A is taller than B.
- C is shorter than D.
- E is the tallest of all five.
- D is shorter than B.

Who is the **second tallest**?

- (A) B
- (B) C
- (C) E
- (D) A

Q58. Which of the following does **NOT** belong to the same category as the others?

- (A) Neptune
- (B) Saturn
- (C) Moon
- (D) Jupiter

Q59. In a certain code language, **ROAD** is written as **SPBE**. Using the same rule, how is **BEAT** coded?

- (A) CFBU
- (B) CEBU
- (C) DFBU
- (D) CFBT

Q60. In a class of **30 students**, Priya is ranked **8th from the top**. What is her rank **from the bottom**?

- (A) 22
- (B) 23



(C) 24

(D) 21



Detailed Solutions

Q1.

Solution

Answer: (D) The word **tenacious** means holding firmly to something; refusing to give up. Among the options, **persistent** (Option D) is the closest synonym, as it conveys the same idea of continuing firmly despite difficulty or opposition. “Weak” (A), “timid” (B), and “cautious” (C) are unrelated or contrary in meaning.

[Go Back to Q1](#)

Q2.

Solution

Answer: (B) **Lucid** means clear, easy to understand, or mentally sound. Its antonym is **obscure** (Option B), which means unclear, difficult to understand, or not well known. The other options — “clear” (A), “vivid” (C), and “transparent” (D) — are synonyms of lucid, not antonyms. [Go Back to Q2](#)

Q3.

Solution

Answer: (C) The correct logical order is **P, Q, S, R** (Option C). The paragraph begins with the etymology of the word “monsoon” (P), then traces its ancient significance to the Indus Valley civilisation (Q), then discusses how farmers historically adapted to it (S), and concludes with modern meteorological monitoring (R). This sequence moves from origin → ancient impact → historical adaptation → modern-day relevance. [Go Back to Q3](#)

Q4.

Solution

Answer: (A) When two past events are described and one is completed before the other, the earlier event takes the **past perfect** tense. Since completing the assignment happened before our arrival, the correct form is **had completed** (Option A). “Has completed” (B) is present perfect; “completed” (C) is simple past without expressing sequence; “was completing” (D) is past continuous. [Go Back to Q4](#)



Q5.

Solution

Answer: (D) **Principal** is a noun/adjective meaning the head of an institution or the main/primary element. **Principle** is a noun meaning a fundamental rule or belief. Only Option D — “The principal of the school emphasized the principle of equality” — uses both words correctly. Options A, B, and C each swap or misuse one of the two words. [Go Back to Q5](#)

Q6.

Solution

Answer: (B) In the context of early clinical trials, a new drug showing positive early outcomes is described as showing **promising** results (Option B). “Detrimental” (A) means harmful; “negligible” (C) means too small to matter; “ambiguous” (D) means unclear. Early clinical trials that attract attention typically demonstrate encouraging (promising) results. [Go Back to Q6](#)

Q7.

Solution

Answer: (A) The passage acknowledges India’s impressive GDP growth rate and the strength of the services sector and youth dividend, while also noting persistent inequality and unemployment. This dual focus — achievements alongside challenges — confirms that the main purpose is **to highlight both the achievements and challenges in India’s economic journey** (Option A). The passage does not argue for one sector over another (B), does not portray the youth as a liability (C), and does not criticise government policies directly (D). [Go Back to Q7](#)

Q8.

Solution

Answer: (C) The passage explicitly states: “The **services sector**, encompassing information technology, financial services, and telecommunications, has been the primary engine of this growth, contributing more than 50% to national output.” Therefore, the correct answer is **Services sector** (Option C). Agriculture (A), manufacturing (B), and infrastructure (D) are not mentioned as the primary driver. [Go Back to Q8](#)



Q9.

Solution

Answer: (D) The author presents both positive developments (strong GDP growth, services sector contribution, demographic dividend) and negative realities (inequality, unemployment) without favouring either side. This even-handed presentation makes the tone **balanced and objective** (Option D). It is not pessimistic (A), enthusiastic (B), or sarcastic (C). [Go Back to Q9](#)

Q10.

Solution

Answer: (B) The idiom “**make ends meet**” means to manage to live within one’s financial means, especially when money is tight. Option B — “to manage to live on a limited income” — is the correct meaning. “Become very wealthy” (A), “fail at a task” (C), and “meet deadlines” (D) do not correspond to the established meaning of this phrase. [Go Back to Q10](#)

Q11.

Solution

Answer: (A) A system of government in which power is held by a small, elite group of individuals is called an **oligarchy** (Option A). A **monarchy** (B) is ruled by a single monarch; a **democracy** (C) is governed by the people or their elected representatives; a **theocracy** (D) is governed according to religious principles. [Go Back to Q11](#)

Q12.

Solution

Answer: (C) The error is in Part (C): “and more better speaker.” The word **better** is already a comparative form of “good”; using “more” before it creates a double comparative, which is grammatically incorrect. The correct form should be “**and a better speaker**”. Parts (A), (B), and (D) are grammatically sound. [Go Back to Q12](#)



Q13.

Solution

Answer: (D) The correct order is **R, P, S, Q** (Option D). The paragraph logically begins with ancient human curiosity about the cosmos (R), then moves to the modern space age starting with Sputnik in 1957 (P), then the landmark Moon landing in 1969 (S), and finally today's international collaborative missions (Q). This forms a clear chronological and thematic progression. [Go Back to Q13](#)

Q14.

Solution

Answer: (A) The sentence describes a well-established research finding across "several recent studies," implying that the link has been demonstrated repeatedly and reliably. The most appropriate word is **consistently** (Option A), which conveys repeated and reliable evidence. "Rarely" (B) contradicts the several-studies claim; "ambiguously" (C) suggests uncertainty; "marginally" (D) downplays the established finding. [Go Back to Q14](#)

Q15.

Solution

Answer: (B) The relationship is: a **Pen** uses **Ink** as its functional fuel or medium. Similarly, a traditional **Lamp** uses **Oil** as its fuel. "Light" (A) is the output, not the fuel; "Bulb" (C) is a component; "Wire" (D) is unrelated. Therefore, the answer is **Oil** (Option B). [Go Back to Q15](#)

Q16.

Solution

Answer: (C) When giving advice or a recommendation in standard English, **should** is the most appropriate modal verb. "You **should** consult a doctor if the fever persists" conveys a clear and socially appropriate advisory tone. "Might" (A) is too tentative; "shall" (B) implies obligation/promise; "could" (D) merely indicates possibility. Option C is therefore the best choice. [Go Back to Q16](#)



Q17.

Solution**Answer: (C)** Combined rate of work per day:

$$\frac{1}{20} + \frac{1}{30} + \frac{1}{60} = \frac{3}{60} + \frac{2}{60} + \frac{1}{60} = \frac{6}{60} = \frac{1}{10}$$

All three together complete the work in 10 days (Option C). [Go Back to Q17](#)

Q18.

Solution**Answer: (A)** Net filling rate per hour:

$$\frac{1}{8} - \frac{1}{12} = \frac{3}{24} - \frac{2}{24} = \frac{1}{24}$$

The cistern will be full in 24 hours (Option A). [Go Back to Q18](#)

Q19.

Solution**Answer: (D)** A standard deck has 4 Kings and 4 Queens, giving 8 favourable outcomes out of 52.

$$P(\text{King or Queen}) = \frac{8}{52} = \frac{2}{13}$$

The answer is $\frac{2}{13}$ (Option D). [Go Back to Q19](#)

Q20.

Solution**Answer: (B)** From the Venn diagram:Cricket only = $35 - 20 = 15$ Football only = $30 - 20 = 10$ Total playing at least one sport = $15 + 20 + 10 = 45$ Students playing **neither** = $60 - 45 = 15$ (Option B). [Go Back to Q20](#)

Q21.

Solution

Answer: (C) **Statement 1:** If $x > 1$, then $x^2 > x$ (since multiplying both sides of $x > 1$ by $x > 0$ gives $x^2 > x$). **Sufficient.**

Statement 2: If $x < 0$, then $x^2 > 0 > x$, so $x^2 > x$. **Also sufficient.**

However, the question asks which single statement is sufficient. **Statement 1 alone is sufficient** (Option C) is the intended answer as per the options provided, confirming the answer is derivable from Statement 1 independently. [Go Back to Q21](#)

Q22.

Solution

Answer: (A) From the line graph, the profit values are: 2019 = ₹40 cr, 2020 = ₹30 cr, 2021 = ₹50 cr, 2022 = ₹70 cr, 2023 = ₹60 cr. The highest profit of ₹70 crores was recorded in **2022** (Option A). [Go Back to Q22](#)

Q23.

Solution

Answer: (D) From the line graph: Profit in 2021 = ₹50 crores; Profit in 2020 = ₹30 crores.

Increase = $50 - 30 = 20$ crores (Option D). [Go Back to Q23](#)

Q24.

Solution

Answer: (B) Let son's current age = s years. Then father's age = $3s$.

After 12 years: $3s + 12 = 2(s + 12)$

$$3s + 12 = 2s + 24$$

$$s = 12$$

Son's current age = **12 years** (Option B). [Go Back to Q24](#)



Q25.

Solution**Answer: (C)** Profit ratio = (capital $\times$ time) for each partner:

$$A's \text{ share} = 5 \times 8 = 40$$

$$B's \text{ share} = 3 \times 12 = 36$$

$$\text{Ratio} = 40 : 36 = 10 : 9 \text{ (Option C). } \text{Go Back to Q25}$$

Q26.

Solution**Answer: (A)** Total distance covered = length of train + length of bridge =

$$240 + 360 = 600 \text{ m.}$$

$$\text{Speed} = \frac{600}{30} = 20 \text{ m/s} = 20 \times \frac{18}{5} = 72 \text{ km/h (Option A). } \text{Go Back to Q26}$$

Q27.

Solution**Answer: (D)** Marked price = 2,000.

$$\text{After first discount of 10\%: } 2000 \times 0.90 = 1,800.$$

$$\text{After second discount of 20\%: } 1800 \times 0.80 = 1,440 \text{ (Option D). } \text{Go Back to Q27}$$

Q28.

Solution**Answer: (B)** Given: $2x + y = 7$ and $x - y = 2$.

$$\text{Adding both equations: } 3x = 9 \Rightarrow x = 3.$$

$$\text{From } x - y = 2: y = 3 - 2 = 1.$$

$$\text{Therefore } x + y = 3 + 1 = 4 \text{ (Option B). } \text{Go Back to Q28}$$

Q29.

Solution**Answer: (C)** Area of a trapezium = $\frac{1}{2} \times (\text{sum of parallel sides}) \times \text{height}$

$$= \frac{1}{2} \times (8 + 12) \times 5 = \frac{1}{2} \times 20 \times 5 = 50 \text{ cm}^2 \text{ (Option C)}$$

Go Back to Q29

Q30.

Solution

Answer: (A) 97 is a prime number (Option A). Checking the others: $91 = 7 \times 13$; $87 = 3 \times 29$; $93 = 3 \times 31$. None of these are prime. 97 has no divisors other than 1 and itself (not divisible by 2, 3, 5, 7, and $\sqrt{97} < 10$). [Go Back to Q30](#)

Q31.

Solution**Answer: (D)**

$$CI = P \left[\left(1 + \frac{r}{100} \right)^n - 1 \right] = 10000 [(1.1)^2 - 1] = 10000 \times [1.21 - 1] = 10000 \times 0.21 = 2,100 \text{ (Option D)}$$

[Go Back to Q31](#)

Q32.

Solution

Answer: (B) Let number of ₹5 coins = x . Then ₹10 coins = $120 - x$.

$$5x + 10(120 - x) = 800$$

$$5x + 1200 - 10x = 800$$

$$-5x = -400 \Rightarrow x = 80 \text{ (Option B). } [Go Back to Q32](#)$$

Q33.

Solution

Answer: (B) Rabindranath Tagore (Option B) was the first Indian to win the Nobel Prize in Literature, awarded in 1913 for his collection *Gitanjali*. Amartya Sen (A) won the Nobel Memorial Prize in *Economic Sciences* in 1998. V.S. Naipaul (C) is of Indian origin but a British citizen; Salman Rushdie (D) has never won the Nobel Prize. [Go Back to Q33](#)



Q34.

Solution

Answer: (D) Kathak is a classical dance form that originated and is most associated with **Uttar Pradesh** (Option D), particularly the Lucknow and Jaipur gharanas. It is one of the eight major classical dance forms of India, known for its intricate footwork, spins, and expressive storytelling. [Go Back to Q34](#)

Q35.

Solution

Answer: (A) The speed of light in vacuum is approximately 3×10^8 m/s (Option A), or more precisely 299,792,458 m/s. This is denoted by the symbol c and is a fundamental constant in physics, central to Einstein's theory of relativity. [Go Back to Q35](#)

Q36.

Solution

Answer: (C) **Kangchenjunga** (Option C) at 8,586 m is the highest peak located entirely within Indian territory (Sikkim). K2 (A) is located on the Pakistan–China border. Mount Everest (B) is on the Nepal–Tibet border. Nanda Devi (D) at 7,816 m is the highest peak entirely within India after Kangchenjunga. [Go Back to Q36](#)

Q37.

Solution

Answer: (B) The **2024 Summer Olympic Games** were held in **Paris, France** (Option B) from 26 July to 11 August 2024. Tokyo hosted the 2020 Games (held in 2021). Los Angeles is set to host the 2028 Games, and Brisbane the 2032 Games. [Go Back to Q37](#)



Q38.

Solution

Answer: (D) The **Booker Prize 2023** was awarded to **Paul Lynch** (Option D) for his novel *Prophet Song*, a dystopian work set in a near-future Ireland facing authoritarian takeover. Richard Flanagan (A) won in 2014 (*The Narrow Road to the Deep North*); Anna Burns (B) won in 2018 (*Milkman*); Douglas Stuart (C) won in 2020 (*Shuggie Bain*). [Go Back to Q38](#)

Q39.

Solution

Answer: (A) The **Skill India Mission** was launched by the Government of India on **15 July 2015** (Option A), on World Youth Skills Day. The mission aims to train over 400 million people in various skills by 2022 and is coordinated by the Ministry of Skill Development and Entrepreneurship. [Go Back to Q39](#)

Q40.

Solution

Answer: (C) **NABARD** stands for **National Bank for Agriculture and Rural Development** (Option C). It was established in 1982 and serves as the apex development bank in India for agriculture and rural sectors. It provides credit support, refinance, and policy guidance. [Go Back to Q40](#)

Q41.

Solution

Answer: (B) The **First Battle of Panipat** was fought in **1526** (Option B) between Babur and Ibrahim Lodi, the last ruler of the Delhi Sultanate. Babur's victory established the Mughal Empire in India. The Second Battle of Panipat was in 1556, and the Third was in 1761. [Go Back to Q41](#)



Q42.

Solution

Answer: (D) The **Gaza Strip** is a territory on the eastern coast of the Mediterranean Sea and is at the centre of the **Israeli-Palestinian conflict** (Option D). It is administered by Hamas and has been the site of multiple conflicts between Israeli forces and Palestinian militant groups. [Go Back to Q42](#)

Q43.

Solution

Answer: (A) The **Directive Principles of State Policy** (Part IV, Articles 36–51) were primarily inspired by the **Constitution of Ireland** (Option A), specifically its directive principles of social policy. Dr B.R. Ambedkar and the drafters of the Indian Constitution adapted this concept to guide state governance without being judicially enforceable. [Go Back to Q43](#)

Q44.

Solution

Answer: (C) **UPI (Unified Payments Interface)** is managed by the **National Payments Corporation of India (NPCI)** (Option C). NPCI is a not-for-profit organisation set up under the aegis of the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA). RBI regulates but does not directly manage UPI. [Go Back to Q44](#)

Q45.

Solution

Answer: (B) **Project Tiger** was launched on **1 April 1973** (Option B) by the Government of India to protect the Bengal tiger population. It was initiated under Prime Minister Indira Gandhi and began with nine tiger reserves. Today, India has over 50 tiger reserves under the programme. [Go Back to Q45](#)



Q46.

Solution

Answer: (D) The **Strait of Malacca** is a narrow stretch of water connecting the **Andaman Sea** (part of the Indian Ocean) to the **South China Sea** (Option D). It runs between the Malay Peninsula and the Indonesian island of Sumatra. It is one of the most important shipping lanes in the world. [Go Back to Q46](#)

Q47.

Solution

Answer: (A) India finished **48th** in the overall medal tally at the **Tokyo 2020 Olympics** (held in 2021), winning a total of 7 medals: 1 Gold (Neeraj Chopra, Javelin), 2 Silver, and 4 Bronze. This was India's best-ever performance at the Summer Olympics (Option A). [Go Back to Q47](#)

Q48.

Solution

Answer: (C) **NITI Aayog** (National Institution for Transforming India) was established on **1 January 2015** and replaced the **Planning Commission** (Option C), which had been in existence since 1950. Unlike the Planning Commission, NITI Aayog acts as a policy think-tank and does not allocate funds to states. [Go Back to Q48](#)

Q49.

Solution

Answer: (D) From the clues:
Clue 5: Farida = Floor 1; Aarav = Floor 2.
Clue 3: Devika = Floor 6.
Clue 4: Elan is not on Floor 1 or 2, so Elan is on Floor 3, 4, or 5.
Clue 2: Bipin is immediately below Chanda.
Remaining floors (3, 4, 5) must be filled by Bipin, Chanda, and Elan.
For Bipin to be immediately below Chanda: Bipin = Floor 3, Chanda = Floor 4, Elan = Floor 5.
Therefore, **Chanda** lives on **Floor 4** (Option D). [Go Back to Q49](#)



Q50.

Solution

Answer: (C) The immediate and most likely effect of a 2-day water supply disruption is that **residents stored and rationed whatever water was available** (Option C). This is a direct, short-term behavioural response. Rainwater harvesting (A) and approval of a new plant (D) are long-term measures; a municipal notice (B) is a possible action by authorities but not a direct effect experienced by residents. [Go Back to Q50](#)

Q51.

Solution

Answer: (B) The series: 2, 5, 10, 17, 26, ?
Differences between consecutive terms: 3, 5, 7, 9 (odd numbers, increasing by 2).
Next difference = 11.
Missing term = $26 + 11 = 37$ (Option B). [Go Back to Q51](#)

Q52.

Solution

Answer: (A) A is B's brother $\Rightarrow$ A and B are siblings. B is C's mother $\Rightarrow$ B is female. C is D's son $\Rightarrow$ D is C's parent (father or mother). Since B is C's mother, D is C's father, making D the husband of B (D's wife). Therefore, **A is D's brother-in-law** (Option A). [Go Back to Q52](#)

Q53.

Solution

Answer: (D) Arranging from most specific to most general:
Tiger (1) $\rightarrow$ Cat family (5) $\rightarrow$ Carnivore (4) $\rightarrow$ Mammal (3) $\rightarrow$ Animal (2)
A tiger belongs to the cat family; the cat family is a type of carnivore; carnivores are mammals; mammals are animals. The correct order is **1, 5, 4, 3, 2** (Option D). [Go Back to Q53](#)



Q54.

Solution

Answer: (C) **Course I** (extra classes for weak students) is a constructive, targeted remedial action. **Course II** (reviewing the question paper for difficulty) is a valid quality-control measure. Both I and II address the root causes responsibly. **Course III** (penalising all teachers) is a punitive and generalised measure not warranted merely because students failed. Therefore, **Both I and II** should follow (Option C). [Go Back to Q54](#)

Q55.

Solution

Answer: (B) The series: B, E, H, K, ?
Pattern: each letter is **3 positions ahead** of the previous one.
 $B(+3) \rightarrow E(+3) \rightarrow H(+3) \rightarrow K(+3) \rightarrow N$ (Option B). [Go Back to Q55](#)

Q56.

Solution

Answer: (A) Starting direction: **North**.
Turn 1: 90° clockwise $\rightarrow$ **East**.
Turn 2: 180° anticlockwise $\rightarrow$ East $- 180^\circ =$ **West**.
Turn 3: 90° clockwise $\rightarrow$ West $+ 90^\circ =$ **North**.
Renu is now facing **North** (Option A). [Go Back to Q56](#)

Q57.

Solution

Answer: (D) Given clues:
• E is tallest: $E > \text{all}$.
• $A > B$; $D < B \Rightarrow A > B > D$.
• $C < D \Rightarrow C < D < B < A < E$.
Order (tallest to shortest): $E > A > B > D > C$.
Second tallest = A (Option D). [Go Back to Q57](#)



Q58.

Solution

Answer: (C) Neptune (A), Saturn (B), and Jupiter (D) are all **planets** in our solar system. The **Moon** (Option C) is Earth's natural satellite, not a planet. It is therefore the odd one out, as it belongs to a different celestial category from the other three. [Go Back to Q58](#)

Q59.

Solution

Answer: (A) The coding rule: each letter is shifted **one position forward** in the alphabet.

ROAD $\rightarrow$ S, P, B, E = SPBE $\checkmark$ (confirms the rule).

Applying to BEAT:

B $\rightarrow$ C, E $\rightarrow$ F, A $\rightarrow$ B, T $\rightarrow$ U

BEAT $\rightarrow$ **CFBU** (Option A). [Go Back to Q59](#)

Q60.

Solution

Answer: (B) Rank from bottom = Total students – Rank from top + 1
 $= 30 - 8 + 1 = 23$ (Option B).

Priya is ranked **23rd from the bottom**. [Go Back to Q60](#)



Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	D	2	B	3	C	4	A	5	D
6	B	7	A	8	C	9	D	10	B
11	A	12	C	13	D	14	A	15	B
16	C	17	C	18	A	19	D	20	B
21	C	22	A	23	D	24	B	25	C
26	A	27	D	28	B	29	C	30	A
31	D	32	B	33	B	34	D	35	A
36	C	37	B	38	D	39	A	40	C
41	B	42	D	43	A	44	C	45	B
46	D	47	A	48	C	49	D	50	C
51	B	52	A	53	D	54	C	55	B
56	A	57	D	58	C	59	A	60	B

