Date : 04/01/2026

Test Booklet Series

C

परीक्षण पुस्तिका अनुक्रम

Test Code
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anubhav-2026

ALL INDIA OPEN MOCK TEST

GENERAL STUDIES PAPER-II

(04th January, 2026)

Answer Key

1. (c)	17. (b)	33. (a)	49. (b)	65. (b)
2. (b)	18. (d)	34. (c)	50. (b)	66. (d)
3. (a)	19. (b)	35. (c)	51. (b)	67. (d)
4. (a)	20. (d)	36. (a)	52. (c)	68. (c)
5. (a)	21. (c)	37. (b)	53. (c)	69. (c)
6. (c)	22. (a)	38. (a)	54. (a)	70. (a)
7. (c)	23. (d)	39. (b)	55. (d)	71. (b)
8. (b)	24. (c)	40. (c)	56. (d)	72. (a)
9. (a)	25. (b)	41. (b)	57. (c)	73. (a)
10. (a)	26. (c)	42. (c)	58. (b)	74. (c)
11. (a)	27. (b)	43. (c)	59. (d)	75. (c)
12. (d)	28. (b)	44. (c)	60. (a)	76. (a)
13. (c)	29. (a)	45. (c)	61. (a)	77. (a)
14. (d)	30. (d)	46. (a)	62. (d)	78. (b)
15. (d)	31. (c)	47. (c)	63. (d)	79. (a)
16. (b)	32. (b)	48. (a)	64. (b)	80. (a)

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1. (c)

Statement (1) is valid as the passage states, 'challenge lies in the mismatch between the … technological change … regulatory institutions'.

Statement (2) is not valid as the passage does not discuss the outcomes of rigid rule making.

Statement (3) is valid as the passage states, 'frameworks that rely excessively on self-regulation assume that market incentives will align with public interest.'

2. (b)

Statement (1) is valid as the passage states, "Without predictable and adequate finance, climate commitments risk being perceived as aspirational rather than actionable."

This implies that credibility of commitments depends on reliable financial support.

Statement (2) is not valid as the passage does not state or assume that developmental needs and climate goals are inherently in tension.

The passage argues that climate action cannot be delinked from development priorities, not that the two are fundamentally conflicting.

Statement (3) is valid as the passage notes that donor countries prefer "short-term or project-based funding" due to political pressures, and further argues that sustainable climate cooperation depends on fulfilling financial responsibilities.

This assumes that short-term funding is insufficient for sustaining long-term cooperation.

Statement (4) is valid as the passage explicitly states that financial flows "shape trust, credibility, and cooperation within the international system", indicating that climate finance has political and relational implications beyond mere economic transfer.

3. (a)

Statement 1:

Valid: The passage explicitly says exclusions remain invisible because performance is judged using aggregate success rates rather than user-level failures. This directly implies concealment of group-specific exclusion.

Statement 2:

Not Valid: The passage criticizes loss of human discretion and highlights systemic risks, but it does not claim this leads to greater inefficiency. Introducing risk or rigidity is not the same as amplifying inefficiency.

Statement 3:

Valid: The passage clearly states that digital infrastructure redistributes power between citizens and the State, often in unintended ways.

Statement 4:

Not Valid: The passage says automated systems are difficult to contest or reverse, which is the opposite of being more contestable than human judgment.

4. (a)

Statement (1) is valid as the passage states that repeated reliance on exceptional powers can "normalize extraordinary governance" and "weaken institutional checks without any formal constitutional amendment."

Statement (2) is not valid as the passage explicitly argues that democratic resilience depends not only on written provisions but also on "restraint, proportionality, and accountability," indicating that written safeguards alone are insufficient.

5. (a)

Let us decode step by step:

- A is brother of B → A is male, B is sibling (gender not specified).
- C is mother of A → C is also mother of B.
- D is sister of C → D is maternal aunt of A & B.
- E is husband of D.
- F is son of E → F is son of D & E.

So:

- A and F share maternal grandparents → cousins
- Statement I → Correct
- Statement II → B's gender is not given → cannot conclude B is daughter

Only I is correct

6. (c)

Step 1: Use divisibility rule of 11

A number is divisible by 11 if:

(Sum of digits in odd positions−Sum of digits in even positions)

is 0 or a multiple of 11.

Step 2: Understand digit positions

- Total digits = 97
- Positions counted from the left
- Since 97 is odd, odd positions = 49, even positions = 48
- The 53rd digit from the left → odd position

Step 3: Assign digit values

Let the unknown digit = x

- All other digits = 7

Odd-position sum:

$= 48 \times 7 + x$

Even-position sum:

$= 48 \times 7$

Step 4: Apply divisibility condition

$(48 \times 7 + x) - (48 \times 7) = x$

For divisibility by 11:

x should be 0

Correct Answer: C. 7

7. (c)

A product is odd iff both numbers are odd.

Exactly one of xy, yz, zx is odd $\Rightarrow$ exactly two numbers are odd and one is even.

$\Rightarrow$ xyz is a multiple of 8 but not 16 $\Rightarrow$ the total power of 2 in the product is exactly 3.

Since there is only one even number, that number must contribute all three factors of 2.

From 1 to 15, the only number with exactly 2^3 is:

So the even number is 8, and the other two numbers are odd.

$\Rightarrow$ **Mean of x and y**

$\frac{x+y}{2}$ is an integer $x + y$ is even $\Rightarrow$ x and y have the same parity.

Thus, x and y must be the two odd numbers, and $= z = 8$.

$\Rightarrow$ **Mean of x, y, z**

$$\frac{x+y+8}{3} \in \mathbb{Z} \Rightarrow x + y \equiv 1$$

$\Rightarrow$ **Count valid odd pairs**

odd numbers from 1 to 15:

1, 3, 5, 9, 11, 13, 15

Number	mod 3
1, 7, 13	1
3, 9, 15	0
5, 11	2

Valid sums ≡ 1 (mod 3):

- (0,1) pairs $3 \times 3 = 9$
- (2, 2) paris $\binom{2}{2} = 1$

Total valid paris:

$$9 + 1 = \boxed{10}$$

Final Answer correct option (c)

8. (b)

Lets the length of candle A as L_A.

- The length of candle B as $L_B = 3L_A$ (since candle B is 3 times the length of candle A).
- The burning speed of candle A as s_A.
- The burning speed of candle B as $s_B = 4s_A$ (since it's burning 4 times faster than candle A).

Given, the numerical value of the length of the burnt portion of candle A is the same as its burning speed, which means after time t hours, $L_A - s_A \cdot t = L_A - 8_A\, t$ (since it burns its own height). Therefore, the length of time for which the candles burn is given by:

$$L_A = s_A \cdot t \Rightarrow t = \frac{L_A}{S_A}$$

At the time the party ends, the heights of both candles are the same.

Equation for candle A:

$H_A = L_A - s_A \cdot t$

Equation for candle B:

$H_B = L_B - s_B \cdot t = 3L_A - 4s_A \cdot t$

Since both heights are equal at time

$L_A - 8_A \cdot t = 3L_A - 4s_A \cdot t$

Simplifying this equation:

$L_A - 8_A \cdot t = 3L_A - 4s_A \cdot t$

$4s_A \cdot t - s_A \cdot t = 3L_A - L_A 3s_A \cdot t = 2L_A \Rightarrow t = \frac{2L_A}{3s_A}$

From our earlier result, $t = \frac{L_A}{s_A}$ based on candle A's consumption and time relation, gives us:

If both results should match, we equate:

$$\frac{2L_A}{3s_A} = \frac{L_A}{s_A}$$

Therefore, we can confirm the provided condition that burning speeds are based on the total length burnt throughout the time:

This results in a balanced value of time:

1 hour

Thus, the correct answer is 1 hour.

9. (a)

1. In a normal orientation: 12 → North, 3 → East, 6 → South, 9 → West. Normally, at 6 PM, the hour hand points to 6, i.e., South. In the problem, at 6 PM the hour hand points West instead. That means: South is appearing as West . So the whole clock has been rotated so that South → West, i.e., the clock is rotated 90° clockwise. At 3: 00 PM, Minute hands point to 12. Normally 12 points to North.
2. Let clockwise be negative, anticlockwise be positive.

Net rotation $= -120° + 165° = 45°$ anticlockwise, So overall she turns 45° anticlockwise from East. From East: 45° anticlockwise points between East and North (i.e., North-East)

So she is not facing South - East.

10. (a)

Give

$P\%$ of $m = q\%$ of n

$$\frac{P}{100}m = \frac{q}{100}n \Rightarrow \frac{n}{m} = \frac{p}{q}$$

Now, let $r\%$ of $n = x\%$ of m

$$\frac{r}{100}n = \frac{x}{100} \Rightarrow x = r\frac{n}{m}$$

Substitute:

$$x = r \cdot \frac{p}{q} = \frac{rp}{q}$$

Final Confirmed answer (a) $\frac{rp}{q}$

11. (a)

Option (a) is correct as the passage argues that opposition sustains democracy by challenging executive authority within procedural limits and warns that framing politics purely as a moral struggle makes conflict irreconcilable.

Option (b) is incorrect as the passage explicitly states that opposition legitimacy derives not merely from electoral performance.

Option (c) is incorrect because the passage treats moral absolutism as a risk that undermines regulated disagreement, not as a source of accountability.

Option (d) is incorrect as the passage emphasizes the opposition's role and shared procedural acceptance, not executive restraint alone.

12. (d)

Option (a) is incorrect as the passage highlights congestion and logistics inefficiencies as systemic problems, not issues solvable through fuel efficiency.

Option (b) is incorrect as the passage does not argue that road expansion resolves congestion-related harms; it emphasizes sustainability, not capacity addition alone.

Option (c) is incorrect because the passage treats health, environment, and economic impacts as interlinked, not separable.

Option (d) is correct as the passage links traffic congestion to reduced economic vitality, and concludes that establishing sustainable transport systems is imperative to address these interconnected effects.

13. (c)

Option (a) is incorrect as the passage goes beyond cost reduction and revival of traditional inputs; it also emphasizes climate resilience, soil health, and confidence-building through phased adoption.

Option (b) is incorrect as the passage highlights that adopting natural farming gradually ("one acre, one season") doesnot helps farmers manage rising input costs, improve resilience to climate variability, and reduce long-term risks.

Option (c) is correct because the passage mentions scientific validation or institutional support; these elements are introduced externally and are not derived from the given text.

Option (d) is incorrect since it only reflects the problem of chemical dependence but does not capture the solution-oriented focus of natural farming and its gradual adoption stressed in the passage.

14. (d)

Statement (1) is valid as the passage states that the rally is driven by "the story and not because of the fundamentals in the business today," implying expectations outweigh current earnings.

Statement (2) is valid as the passage contrasts bulls and bears based on belief in an AI-led narrative, indicating investor behavior is shaped by prevailing stories.

Statement (3) is not valid as the passage explicitly questions business fundamentals and does not assume that AI investments ensure long-term profitability.

Statement (4) is valid as the passage notes that the rally is "predominantly led by a few companies" and disconnected from fundamentals, implying it may not reflect the broader market reality.

15. (d)

- 15th August 2021 = Sunday → Person born on Sunday = C
- From (1): A is third to the right of C
- From (5): E is immediately right of C

So sequence around C:

C – E – ? – A

Now B sits immediately left of A → B comes just before A

D sits at one end

Final correct order (left to right):

D/F – C – E – B – A – D/F

$\Rightarrow$ Both Statement I and II are not correct

16. (b)

Each statement alone is sufficient to answer the question.

Given number (P) is 2 digit number.

So, $0<P<100$. So, Question is whether $P<40$

1. let $P = xy$

$\Rightarrow y = x + 6$

y can maximum be 9, in which case x would be 3 (P = 39 max)

so $P < 40$ – Yes, sufficient.

2. let $P = xy$

$\Rightarrow 10x + y = 4y - 4$

$\Rightarrow 10x = 3y - 4$

$(x,y) = (2,8)$ is the only valid solution

so $N < 40$ – Yes, sufficient

17. (b)

Clock gains 1 min per hour, so in 60 min faulty clock shows 61 min. So indicated time: real time = 61:60. Indicated time elapsed from

1 pm to 6 pm = 5 hours = 300 min (indicated). Real time elapsed = 300 x 60/61 = 18000 /61 min = 295 + 5/61 min. Now, 295 min = 4 hr 55 min and remaining = 5/61. Hence time is 1 pm+ 4h 55 5/61 min = 5h 55 5/61 min. Hence time is 55 (5/61) min past 5 pm.

2. When the hands of the clock are in the same straight line but not together, they are 30 minute spaces apart. At 7 o'clock, they are 25 min. spaces apart. Minute hand will have to gain only 5 min. spaces. 55 min. spaces are gained in 60 min.5 min. spaces are gained in (60/55 x 5) min = 5 (5/11) min. Hence, Required time = 5 (5/11) min. past 7.

18. (d)

Let boys : girls in District A = 5 : 3

Assume:

- Boys = $5x$
- Girls = $3x$

District B:

- Girls = $3x$ + 25% of $3x$ = $3.75x$
- Boys = $5x$ − 20% of $5x$ = $4x$

So ratio in B = 4 : 3.75 = 16 : 15, not 4 : 3

$\Rightarrow$ Statement I is incorrect

Total in A = $8x$

Total in B = $7.75x$ less than A

$7.75x < 8x \rightarrow$ Statement II also

$\Rightarrow$ Both incorrect

Answer: (d) Neither I nor II

19. (b)

On combining the statements, we get

$J \leq P < U \leq M, D \geq S \geq U > P$

I. $J \leq M$ (False)

II. $D > P$ (True)

Hence, only Conclusion II is true.

Conclusion I : J ≤ M

From statement (2):

$$J < P < U$$

From statement (1):

$$U \leq M$$

So,

$$J \leq M \text{ (False)}$$

Conclusion I is not true

Conclusion II: D > P

From statement (1):

$$D \geq U$$

From statement (2):

$$P < U$$

So,

$D \geq U > P \Rightarrow$ D > P

Conclusion II is true

20. (d)

Statement 1: P has 3 digits, hence P can be any number between 100 and 999. Number of digits in $(100)^3$ = 7, No of digits in $(1000)^3$ = 10, hence $(999)^3$ will have 9 digits. So, number of digits can be 7 or 8 or 9. Hence, can't be exactly predicted. Hence 1 alone is not sufficient.

Statement 2: P^2 has 5 digits, so smallest P is 100 as $(100)^2$ has 5 digits. Largest P would be close to 300 as $(300)^2$ = 90000 and has 5 digits. So, if P = 100, then, P^3 has 7 digits and if P = 300, then P^3 has 8 digits. Hence 2 alone is not sufficient.

Combining both statements also, the number of digits could be 7 or 8.

Hence the question cannot be answered by combining both the statements also.

21. (c)

Statement (1) is valid as the passage emphasizes strong macro fundamentals, low inflation, and stable growth, implying reduced downside risk relative to volatile global markets.

Statement (2) is not valid as the passage compares debt returns (7% government, 9–13% corporate) to safety and stability, not to historical long-term equity averages.

Statement (3) is valid as the passage explicitly links global volatility from wars and political regime changes to India's appeal as a destination for capital preservation.

Statement (4) is not valid because while corporate balance sheets are described as strong, the passage does not assume or imply elimination of default risk.

Statement (5) is valid as the recommendation to shift 40–50% capital into debt suggests a reduced volatility without proportionate sacrifice in returns.

22. (a)

Statement (1) is valid as the passage states that climate action has a "fundamentally distributive nature" and that technical framing obscures how "costs and opportunities" are allocated unevenly.

This necessarily assumes that climate negotiations involve political choices.

Statement (2) is not valid as the passage explicitly argues the opposite:

"Efforts to depoliticize climate negotiations through standardized frameworks frequently fail because underlying inequalities remain unresolved."

Hence, technical frameworks alone are insufficient.

Statement (3) is valid as the passage concludes that climate diplomacy requires "explicit engagement with historical responsibility and differential capacities."

This assumes that historical emissions and development trajectories influence current negotiation positions.

Statement (4) is not valid as the passage does not suggest that developing countries reject mitigation commitments altogether.

It only states that such commitments "cannot be isolated from development imperatives", not that they are incompatible or unacceptable.

23. (d)

Option (a) is incorrect as the passage discusses conversion of Geranium waste into biochar for soil improvement and carbon storage, not its use as a renewable fuel source.

Option (b) is incorrect because the passage does not provide evidence that the process is low-cost or energy-efficient, nor does it specifically state that it is attractive to farmers.

Option (c) is incorrect since the passage talks about utilizing existing Geranium waste, not encouraging farmers to cultivate Geranium specifically for fertilizer use.

Option (d) is correct as the passage emphasizes that processing Geranium waste into biochar can improve soil quality, store carbon, reduce environmental impact, and enhance crop yields across India, making this the most logical and practical implication.

24. (c)

Option (c) is correct because the passage states that advisers with prior misconduct or working in high-misconduct firms are "often completely unaffected by the ethics exam" and that firm-level "contagion of misconduct" weakens ethics training. This implies exams alone are insufficient as a primary deterrent.

Option (a) is incorrect as the passage explicitly notes that the least experienced advisers are most responsive to ethics testing.

Option (b) is incorrect because the passage emphasizes firm-level contagion, implying support for broader interventions beyond individual testing.

Option (d) is incorrect as addressing organizational culture directly aligns with the passage's concern about misconduct being reinforced at the firm level.

25. (b)

- Cubes with at most two painted faces are removed
- Only cubes with more than two painted faces remain
- Only corner cubes have 3 painted faces
- Number of corner cubes = 8
- Painted faces remaining:

$$8 \times 3 = 24$$

Final confirmed answer (b) 24

26. (c)

Given:

6 persons take 6 hours to paint 6 walls of equal area.

To find: Time taken by 8 persons to paint 8 walls of equal area.

Formula used:

Work = Persons × Time

Walls painted are proportional to the work done.

Calculation:

Work done by 6 persons in 5 hours:

$\Rightarrow$ Work = 6 × 6 = 36

Each wall requires 36 ÷ 6 = 6 units of work.

Work required for 8 walls:

$\Rightarrow$ Total work = 8 × 6 = 48

Time taken by 8 persons:

$\Rightarrow$ Time = Total work ÷ Persons

$\Rightarrow$ Time = 48 ÷ 8

$\Rightarrow$ Time = 6 hours

$\therefore$ The correct answer is option (c).

27. (b)

Given :

$N \equiv 7 \pmod{12}$, $N \equiv 13 \pmod{18}$, $N \equiv 25 \pmod{30}$

Observe:

$$12 - 7 = 18 - 13 = 30 - 25 = 5$$

So,

$N + 5$ is divisible by 13, 18, 30

$$\text{LCM}(12, 18, 30) = 180 \Rightarrow N + 5 = 180 \Rightarrow N = 175$$

Sum of digits:

$$1 + 7 + 5 = 13$$

Answer (13)

28. (b)

Statement 1: on solving, we get p = 9, hence $2^p > 100$. Hence sufficient.

Statement 2: when we inverse the equation we get, $2^p > 100$. Hence sufficient.

29. (a)

1 alone is sufficient to answer the question but not 2 alone.

Statement 1: $\sqrt{p}$ is an integer, hence (integer) integer is an integer, hence sufficient.

Statement 2: $\sqrt{q}$ is an integer, If p = q = 1, then answer is yes, but if p = 2 and q =1 , then it is not an integer. Hence not sufficient

30. (d)

Here, we have two objectives to achieve at the same time. Firstly, we have to help the villager who has come from far off. Secondly, we have to reach the second meeting on time.

Option (d) allows us to achieve both.

Option (c) also achieves the same objectives though it means that the villager will have to wait for a little more time.

Options (a) and (b) are wrong as, they will increase the troubles of the villager who might not be able to wait longer.

31. (c)

Statement (1) is valid as the passage emphasizes long-term programmatic and investment cycles and the interconnectedness of agrifood systems, assuming that short-term or isolated actions are inadequate.

Statement (2) is valid as the passage highlights the catalytic role of systems leaders and inclusive governance, implying leadership and governance structures influence outcomes at a systemic level.

Statement (3) is valid because the passage treats intangible outputs such as changes in thinking, relationships, and agency as essential precursors to durable transformation, assuming behavioral and institutional change enables material outcomes.

Statement (4) is valid as the passage explicitly argues that both tangible and intangible outputs are necessary, assuming measurable outputs alone do not capture transformational depth.

Statement (5) is not valid as the passage supports inclusive governance but does not assume that participation by itself guarantees success; it is presented as an enabling condition, not a sufficient one.

32. (b)

Statement 1 is valid

The passage emphasizes farmer caution, limited crop cycles, and the need for proven effectiveness at the farm level, making pilot-based validation essential.

Statement 2 is invalid

The passage explicitly warns against premature scaling, as earlier technologies overpromised and underdelivered.

Statement 3 is valid

Real-world conditions are shown to differ from lab environments; hence validation before promotion is a logical implication.

Statement 4 is valid

Risk versus reward is central to farmers' hesitation, making insurance-based risk mitigation a practical policy response.

Statement 5 is invalid

The passage clearly states that automation does not automatically improve ROI and can even increase effort.

Statement 6 is valid

Since faulty or underperforming equipment affected ROI and trust, protection mechanisms like buybacks or guarantees are a rational policy implication.

33. (a)

Statement (1) is valid as the passage repeatedly emphasizes stewardship rather than hegemony, contested leadership, and partnerships grounded in mutual benefit, implying that dominance alone cannot sustain India's maritime role.

Statement (2) is not valid as the passage explicitly notes China's assertive presence, conditional Western support, and divergent trajectories of the Global South, indicating the absence of uniform external support.

34. (c)

Option (c) is correct as it integrates all core elements of the passage: the necessity of maritime power, the contested environment, and the proposed path of stewardship, partnerships, and realism rather than dominance.

Option (a) is incorrect because it captures important components (naval, economic, diplomatic) but misses the passage's normative recommendation - 'by pursuing stewardship rather than hegemony, by aligning economic power with naval reach, and by crafting partnerships grounded in mutual benefit rather than dominance.'

Option (b) is incorrect as the passage does not argue that competition constrains ambition altogether; instead, it suggests ambition must be pursued differently.

Option (d) is incorrect because while geopolitical pressures are acknowledged, the passage frames India's maritime turn as strategic and necessary, not merely reactive.

35. (c)

First convert each person's work information into hours of work per task.

Ram:

- 15 days × 4 hours/day = 60 hours to complete task

→ Rate = 1/60 task per hour

Shyam:

- 8 days × 5 hours/day = 40 hours to complete task

→ Rate = 1/40 task per hour

Now apply the new working agreement:

- Ram works 2 hours per day
- Shyam works double Ram's hours per day

→ 4 hours/day

- Ram works double Shyam's days

Let Shyam work for x days

→ Ram works $2x$ days

Work done

Ram's total hours

2 h/day×$2x$ days = $4x$ hours, Work contribution: $4x/60 = x/15$

Shyam's total hours

4 h/day×x days = $4x$ hours, Work contribution:, $4x/40$ i.e. $x/10$

Total work = 1 task

$x/15 + x/10 = 1$, hence $x = 6$.

36. (a)

This is a distribution of identical objects into distinct boxes with no box empty problem.

Step 1: Identify parameters

- **Number of identical toys = 13**
- **Number of distinct boxes = 4**
- **Each box must have at least 1 toy**

Step 2: Adjust for "no box empty"

Give 1 toy to each box first.

Remaining toys

$13 - 4 = 9$

Now distribute 9 identical toys into 4 distinct boxes with no restriction.

Step 3: Apply Stars and Bars formula

Number of ways:

$= ({}^{9+4-1}C_{4-1}) = ({}^{12}C_3)$

Correct Answer: (a) 220

37. (b)

- Profit ∝ Investment × Time
- Equal profit ⇒ Time ∝ 1/Investment

Given investment ratio:

$$3 : 5 : 8$$

So time ratio:

$$\frac{1}{3} : \frac{1}{5} : \frac{1}{8}$$

Multiply by LCM = 120

$$40 : 24 : 15$$

(b) 40 : 24 : 15

38. (a)

GOD = sum of places = 420 divide by no. of alphabets in the letter. Hence 420/3 = 140, EVEN = 7700/4 = 1925, hence, ANGEL = 5880/5 = 1176

39. (b)

Given

- $N = x + y$
- $2 < x < 10 \Rightarrow x = 3, 4, 5, 6, 7, 8, 9$
- $14 < y < 23 \Rightarrow y = 15, 16, ..., 22$
- $N > 25$

Minimum & maximum possible N

- Minimum $N = 3 + 15 = 18$
- Maximum $N = 9 + 12 = 31$

We need value of N **greater than 25**, i.e:

$$N = 26, 27, 28, 29, 30, 31$$

Each of these can be formed (e.g., 26 = 4 + 22, 31 = 9 + 22, etc).

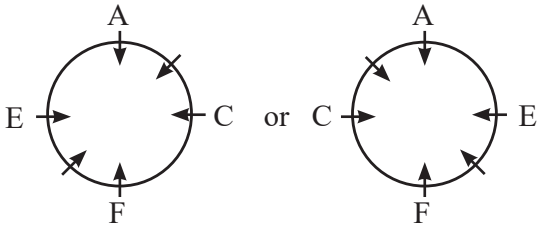
Count of distinct possible values

26, 27, 28, 29, 30, 31 ⇒ 6 values

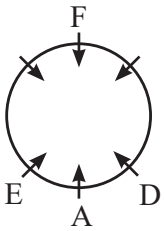
Correct Answer (b) 6

40. (c)

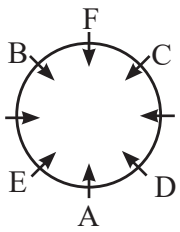
From Statement I,



From Statement II,



Now, from Statements I and II,



Clearly, C sits to the immediate left of F.

Hence, data in both the statements are required to answer the questions.

41. (b)

The passage emphasizes that **borrowing is not inherently bad**, but its success depends on **quality, targeting, and efficient execution of expenditure,** and that fiscal discipline is about **how money is spent,** not just reducing deficits.

Option-wise check:

(a) Incorrect – passage does not argue for deficit reduction at the cost of growth.

(b) Correct – directly reflects the idea that borrowing aids growth only if spending is efficient and (b) well-executed.

(c) Incorrect – mitigate shocks. passage warns that fiscal stress limits shock response; borrowing alone cannot fully

(d) Incorrect – passage focuses on **spending quality,** not primarily on revenue inadequacy.

Most logical inference

42. (c)

Assumption 1 is valid

The passage contrasts traditional riverine flooding (Ganga–Brahmaputra) with the rising incidence of pluvial flooding in urban centres. It clearly implies that approaches focused mainly on major rivers are insufficient to address emerging urban flood risks driven by drainage failure and intense rainfall.

Assumption 2 is valid

The passage states that the re/insurance sector can absorb financial losses and emphasizes the need for viable flood insurance solutions, supported by robust risk assessment and data. This implies that financial risk transfer mechanisms are an important component of long-term flood resilience, even though they must be complemented by broader stakeholder collaboration.

43. (c)

Option (c) is correct as it captures the passage's central argument: India's flood risks are changing—especially in urban areas—necessitating coordinated mitigation, resilience-building, and sophisticated risk assessment across stakeholders.

Option (a) is incorrect as it focuses narrowly on causes of urban flooding and misses the emphasis on insurance, resilience, and systemic planning.

Option (b) is incorrect because the passage treats insurance as supportive, not sufficient or central.

Option (d) is incorrect as the passage explicitly contrasts traditional riverine flooding with the rising significance of urban pluvial flooding.

44. (c)

From Statement I

Months according to Sonal's mother = February, April, June, September, November

From Statement II,

Months according to Sonal's father = January, February November

From Statements I and II,

Sonal's birthday = February.

Hence, the data in both the statements are necessary to answer the question.

45. (c)

Data (16 students):

38, 8, 34, 14, 30, 4, 36, 22, 30, 34, 38, 8, 6, 4, 12, 18

Arranged order:

4, 4, 6, 8, 8, 12, 14, 18, 22, 30, 30, 34, 34, 36, 38, 38

$$\text{Median} = \frac{18+22}{2} = 20$$

$$\text{Sum} = 336 \Rightarrow \text{Mean} = \frac{336}{16} = 21$$

Difference = 21 – 20 = 1.0

Answer 1.0

46. (a)

From positions I and II, common letter = P

From position I, (Clockwise) P S U

From position II, (Clockwise) P R Q

Looking at the first two figures we see that Q is opposite to U and R is opposite to S. The third figure tells us that T is opposite to P. Thus, the numbers A and B, which are adjacent to

T could be any of the following four, U and S, S and Q, Q and R, and R and U. Out of these only Q and R are given in a option,

so (a) is the right answer.

47. (c)

Step 1: Cost Price (CP)

Cost per good = ₹25

If he sells n goods:

Total CP = $25n$

Step 2: Selling Price (SP)

Selling prices form an AP:

$3,6,9,\ldots,3n$

Sum of SP for n goods:

Total SP = $3(1+2+3+\cdots+n) = 3\times n(n+1)/2$

$$\frac{3n}{2}(n+1) - 25n \geq 0.32$$

Solving, $n \geq 21$

Hence nearest option is 24.

48. (a)

To minimise the number of boxes, we must maximise the number of sweets per box.

That means finding the HCF (GCD) of all given quantities.

Step 1: Find HCF

HCF of (36,180,144,108,216,72) = 36

So, each box will contain 36 sweets.

Step 2: Find total number of sweets

36+180+144+108+216+72 = 756

Step 3: Number of boxes

756/36 = 21

But each variety must be packed separately.

So calculate boxes per variety:

- 36 ÷ 36 = 1
- 180 ÷ 36 = 5
- 144 ÷ 36 = 4
- 108 ÷ 36 = 3
- 216 ÷ 36 = 6
- 72 ÷ 36 = 2

Total boxes = 1 + 5 + 4 + 3 + 6 + 2 = 21

49. (b)

x,y,z can be anything from 1 to 39.

Hence $|x-y|+|y-z|+|z-x|$ can be maximum if we take $x = 1$, $y = 2$ and $z = 39$

Then, $|1-2| + |2-39| + |39-1| = 1+37+38 = 76$

50. (b)

Let the usual time taken = t hours

Given, distance, d = 40 × (t + 2.5)

Next day, 2d/3 of the distance covered in t/2 of the time

Remaining distance, d/3 = 40 × t/2

$\Rightarrow$ d = 60t $\Rightarrow$ 60t = 40t + 100 $\Rightarrow$ t = 5 hours

The usual scheduled arrival time = 10 AM + 5 hrs = 3:00 PM

51. (b)

Statement (1) is valid as the passage notes that India's hydrocarbon potential remains "largely untapped" despite reforms.

Statement (2) is valid as the passage stresses the need to move toward "integrated, data-rich subsurface intelligence."

Statement (3) is not valid as the passage does not suggest that foreign capital dependence constrains exploration.

Statement (4) is valid as the passage cautions that technology must be "contextually relevant" to India's geological diversity.

Statement (5) is valid as the passage explicitly calls for deeper collaboration across multiple stakeholders.

52. (c)

Statement (1) is valid as the passage argues that despite reforms, urgent interventions, mindset change, and collaboration are required.

Statement (2) is valid as AI and cloud tools are said to identify not only hydrocarbons but also carbon capture, geothermal energy, and low-impact alternatives.

Statement (3) is not valid as the passage explicitly rejects uniform solutions, emphasizing contextually relevant approaches.

53. (c)

Option (c) is correct because it alone integrates all critical dimensions of the passage: policy reform, technology, mindset shift, sustainability, and ecosystem-wide collaboration tailored to India's geology.

Option (a) is incorrect as it is narrower and underplays the passage's emphasis on sustainability, mindset change, and cross-sector collaboration.

Option (b) is incorrect because it over-centers technology and data analytics, whereas the passage explicitly states that technology alone is insufficient.

Option (d) is incorrect as it suggests a reframing limited to hydrocarbons and transition alignment, missing the emphasis on collaboration and context-specific solution design.

54. (a)

$I \Rightarrow 36 \div 2 \times 12 + 3 - 6 = 24$

$36 \div 2 - 12 + 3 \times 6 = 24$

$18 - 12 + 18 = 24$

$36 - 12 = 24$

$24 = 24$

I is correct

Statements $2 \Rightarrow 26(52)8 \rightarrow \frac{26 \times 8}{4} = 52$

$$48(192)16 \rightarrow \frac{48 \times 16}{4} = 192$$

$$A(175)14 \rightarrow \frac{A \times 14}{4} = 175$$

$$A = \frac{145 \times 4}{14} = \frac{175 \times 2}{7} = 25 \times 2 = 50$$

55. (d)

Let

- **a:** only M, b: only R, c: only E, d: M∩R only, e: M∩E only, f: R∩E only, g: M∩R∩E

Number who passed Mathematics = a+d+e+g

Now **Statement 1:** Number of students who passed Mathematics and Reasoning together is 40 more than the number who passed Mathematics and English together

$(e+g) = 40 + (d+g) \Rightarrow e = 40 + d$

Statement 2: The number of students who passed Mathematics is 120 more than the number who passed both Reasoning and English together.

$(a+e+d+g) = 120 + (f+g) \Rightarrow a+e+d = 120 + f$

Statement 3: The number of students who passed all three subjects together is 50.

$g = 50$

To find: value of (a+e+d+g)

As g =50, a+e+d = 120+f and value of f cannot be determined.

So I alone is not sufficient, I and II together are not sufficient, I, II and III together are also not sufficient to answer the question.

56. (d)

1. Some researchers are not businesspersons

Some researchers policymakers bureaucrats not businesspersons

True

II. No policymaker is a businessperson

Policymakers Bureaucrats and no Bureaucrat is a Businessperson

True

III. Some academicians are not policymakers

Some academicians are businesspersons, and businesspersons policymakers

True

IV. Some researchers are bureaucrats

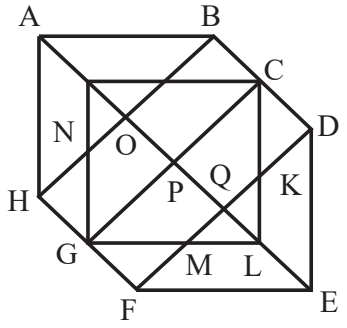
Some researchers policymakers - bureaucrats

True

Answer (d) I, II, III and IV

57. (c)

Given figure can be labelled as follows,



Single triangles = ΔBCJ , ΔCDK, ΔKLQ, ΔLMQ, ΔFGM, ΔGHN, ΔNOI, ΔIJO, ΔAOB, ΔDEQ, ΔFEQ, ΔAOH< ΔGIP, ΔCIP, ΔCLP, ΔGLP = 16

Triangles formed with two triangles ΔKLM, ΔNIJ = 2

Triangles formed with four or more triangles = ΔKLM , ΔNIJ = 2

Triangles formed with four or more triangles = ΔABH, ΔDEF, ΔICG,

∴ Total number of triangles

= 16 + 2 + 6 = 24

58. (b)

C ∪ F ∪ B = C + F + B - (C ∩ F) - (F ∩ B) - (C ∩ B) + (C ∩ F ∩ B)

= 70 + 28 + 46 - 14 - 9 - 23 + 4

= 102.

'The number of students who did not opt for any of the three sports' = 140 - (C ∪ F ∪ B)

= 140 – 102

= 38

59. (d)

Total prime Numbers before 120,

2, 3, 5, 7, 11, 13, 17, 19, 23, 27, 31,37

41, 43, 47, 53, 59, 61, 67, 71, 73, 79

83, 89, 97, 101, 103, 107, 109, 113

Total = 30 Prime Num + 1 = 31 are the number which are not divisible by 2, 3, 5 or 7.

60. (a)

To start with, 'abcabc' = 'abc' * 1001 or abc * 7 * 11 * 13 (This is a critical idea to remember).

'abc' has only two factors. Or, 'abc' has to be prime. Only a prime number can have exactly two factors. (This is in fact the definition of a prime number)

So, 'abcabc' is a number like 101101 or 103103.

'abcabc' can be broken as 'abc' * 7 * 11 * 13. Or, a p * 7 * 11 * 13 where p is a prime.

As we have already seen, any number of the form paqbrc will have (a + 1) (b + 1) (c + 1) factors, where p, q, r are prime.

So, p * 7 * 11 * 13 will have = (1 + 1) * (1 + 1) * (1 + 1) * (1 + 1) = 16 factors

61. (a)

Option (a) is correct as it encapsulates the passage's central emphasis: while data and tools matter, meaningful transformation is ultimately driven by human interaction, empathy, and shared understanding.

Option (b) is incorrect because it focuses narrowly on understanding tools, missing the deeper emphasis on human connection and dialogue.

Option (c) is incorrect as it overemphasizes communication clarity without capturing coaching, empathy, and inclusivity. It mentions 'aligning workforce behaviour' which is not the goal of the passage.

Option (d) is incorrect because it reframes the passage as primarily about skill development rather than human-centered change processes.

62. (d)

Statement 1–Correct: The passage identifies the single-operator model as the core constraint, logically implying the need for multiple parallel operators.

Statement 2–Correct: The gap between 100 GW targets and NPCIL's limited, delayed execution shows targets must align with institutional capacity.

Statement 3–Correct: NPCIL's dependence on competing budgetary allocations implies the need for dedicated, ring-fenced financing mechanisms.

Statement 4–Correct: Chronic delays and scale overload indicate the need for decentralised and accountable project execution structures.

Statement 5–Incorrect: The passage highlights execution and capacity constraints, not technology gaps, making this implication unsupported.

63. (d)

- **Statement 1 – Incorrect:** While 26% are cloud-based and more than half lack unified data warehouses, the passage does not define a single composite threshold for "infrastructure prerequisites." This is a conflation inference
- **Statement 2 – Incorrect:** Absence of cloud infrastructure (around 74%) is more prevalent than absence of unified data architecture (just over 50%), contradicting the statement.
- **Statement 3 – Incorrect:** The passage provides no linkage between cloud adoption and the ability to track AI performance or ROI.
- **Statement 4 – Correct:** With half unable to track deployment and 52% unable to measure ROI, AI initiatives in over half of organizations cannot be reliably evaluated.
- **Statement 5 – Correct:** The confinement of AI to isolated pilots due to weak metrics implies missing institutional mechanisms for scaling decisions.

64. (b)

ratio = (25+50+40) / (35+40+50) = 23/25

65. (b)

Three-digit number where middle digit = sum of first & third

Condition :

$$b = a + c$$

Possible values:

- a = 1 to 9
- c = 0 to 9
- b ≤ 0 9

Count all valid (a, c) pairs such that $a + c \leq 9$

Total such number = 45

(b) 45

66. (d)

Step 1: Key Observation

If a book has pages numbered from 1 to n, then:

Sum of all pages = $n(n+1)/2$

If one page is torn, its two sides are consecutive numbers, say x and $(x+1)$.

So:

$n(n+1)/2-[x+(x+1)] = 18276$

$\Rightarrow\ n(n+1)/2-(2x+1) = 18276$

Step 2: Nearest Triangular Number

Check triangular numbers around 18,276.

$191\times192/2 = 18336$

Difference:

$18336-18276 = 60$

So,

$2x + 1 = 60 \Rightarrow 2x = 59 \Rightarrow x = 29.5$(not possible)

Try next:

$192\times193/2 = 18528$ $18528-18276 = 252$

$2x + 1 = 252 \Rightarrow x = 125.5$(not integer)

Try earlier:

$190 \times 191/2 = 18145$ $18276 - 18145 = 131$

$2x + 1 = 131 \Rightarrow x = 65$

Step 3: Torn Pages

Pages torn are:

65 and 66

Sum:

65 + 66 = 131

Correct Answer- (d)

67. (d)

Some Graduates are not politicians and some economists are graduates who are not politicians.

68. (c)

- First calculate the difference in total students, then divide by years for average decrease.
- Percentage decrease = (decrease ÷ original) × 100.

69. (c)

Statement I: $x^2 < x$

Since $0 < x < 1$,

- Squaring a number between 0 and 1 makes it smaller
- (example: (0.5^2 = 0.25 < 0.5)

So,

$x^2 < x$ (Always true)

Statement I is correct

Statement II : $\frac{1}{x} > x$

For $0 < x < 1$,

- Reciprocal of x is greater than 1
- While $x < 1$

So,

$\frac{1}{x} > x$ (Alwaysn true)

Statement II correct

Final Answer : (c) Both I and II

70. (a)

The increase would make no sense without passengers. Hence, Assumption I is implicit. Assumption II may be a probable reason but not a necessary one for the increase. Hence, II is invalid.

71. (b)

(a) **Incorrect:** The passage criticizes treating climate change as a conventional environmental policy issue rather than endorsing it.

(b) **Correct:** It captures the core argument that separating ecology from politics leads to misunderstanding climate change's planetary nature.

(c) **Incorrect:** The passage presents political geoecology as an analytical lens, not as a replacement governance model for sustainability.

(d) **Incorrect:** While modern societies are linked to ecological systems, the passage's focus is on political–ecological integration, not primary dependence on resource extraction.

72. (a)

(a) **Correct:** The passage describes large-scale land degradation creating a vicious cycle that erodes soil, water availability, and the long-term resilience of agri-food systems.

(b) **Incorrect:** While agricultural expansion is mentioned, the passage explicitly argues that it exacerbates ecological stress rather than offsetting it through adaptive management.

(c) **Incorrect:** The passage states that pressure on soil and water resources is already undermining agriculture's capacity, contradicting the claim of sustained productivity.

(d) **Incorrect:** Environmental stress is not merely redistributed; the passage emphasizes systemic degradation affecting both farmlands and natural ecosystems.

73. (a)

- **Assumption 1 is valid:**

The passage explicitly links poor land-use management and agricultural expansion to widespread land degradation and to the weakening of agri-food system resilience,

implying that unsustainable agricultural practices are a primary driver of both problems.

- **Assumption 2 is not valid:**

  The passage states that agricultural expansion drives deforestation and further accelerates land degradation, thereby worsening productivity and resilience rather than compensating for losses caused by soil and water degradation.

74. (c)

Person	Subject	Day
T	Geography	Tuesday
Q	Chemistry	Tuesday
R	Maths	Monday
V	Physics	Thursday
S	Biology	Friday
U	History	Wednesday
P	English	Wednesday

75. (c)

Daily work rates

- $X = \frac{1}{20}$
- $Y = \frac{1}{30}$

Together:

$$\frac{1}{20} + \frac{1}{30} = \frac{3+2}{60} = \frac{5}{60} = \frac{1}{12}$$

Step : 2 Work done by x alone in 8 days

$$8 \times \frac{1}{20} = \frac{8}{20} = \frac{2}{5}$$

So, work done earlier together :

$$1 - \frac{2}{5} = \frac{3}{5}$$

Step 3: Time worked together

$$\frac{\frac{3}{5}}{\frac{1}{12}} = \frac{3}{5} \times 12 = \frac{36}{5} 7.2 \text{ days}$$

Answer : 7.2 days

76. (a)

Given Information (from Statement I)

Commands:

- 1 → +1 mango
- 2 → +1 orange
- 3 → +1 apple
- 5 → −1 mango and −1 orange

Sequence:

2 1 3 3 2 1 5 2 3 1 5 2 2 3 3 1 5 1 1 3 2 3 5

What is asked?

Number of ORANGES in the basket at the end

So we only track:

- Command 2 (adds orange)
- Command 5 (removes orange)

All other commands are irrelevant.

Step 1: Count all additions of oranges (Command 2)

Scan the sequence and count 2:

Positions of 2 →

1, 5, 8, 12, 13, 20

Total 2's = 6

So,

Oranges added = 6

Step 2: Count all removals of oranges (Command 5)

Each 5 removes 1 orange.

Positions of 5 →

7, 11, 17, 23

Total 5's = 4

So,

Oranges removed = 4

Step 3: Net oranges at the end

Final oranges=Added−Removed =6−4=2

Role of Statement II

"At no point was the basket allowed to have negative fruits."

- This only ensures the sequence is valid
- It does not change counting
- It gives no numerical value

Statement II is not required

77. (a)

25% discount on the marked price is more than an 18% discount followed by a 7% successive discount.

Let Marked Price = 100

- Single discount 25%

  Discount = 25 → Final Price = 75
- Successive discounts 18% and 7%

  After 7% on 82 → Discount = 0.07 × 82 = 5.74

Total discount = 18 + 5.74 = 23.74%

So,

25% > 23.74%

Assertion is TRUE

Reason

The successive discount is on the discounted amount

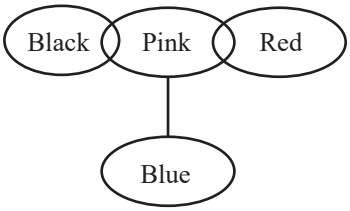
This is factually correct and it explains why the second method gives a smaller overall discount.

Reason is TRUE

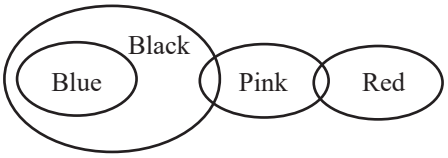
Reason correctly explains the assertion

78. (b)

From Statement IV,



From Statement V,



Conclusions

I. Some reds being black is a possibility.

II. Some blue being red is a possibility.

Something

79. (a)

Let the initial number of sapphires = x

Step 1: Work backwards (Reverse Method)

After the 4th watchman, thief has 2 sapphires.

Before giving to the 4th watchman:

- He gave half + 3
- So remaining = 2

Let amount before meeting 4th watchman be a:

$a-(a/2)-3 = 2$

$\Rightarrow a = 10$

Step 2: Before 3rd watchman

Let amount be b:

$b-(b/2)-3 = 10$

$\Rightarrow b = 26$

Step 3: Before 2nd watchman

$c-(c/2)-3 = 26$

$\Rightarrow c = 58$

Step 4: Before 1st watchman (Original amount)

$x-(x/2)-3 = 58$

$\Rightarrow x = 122$

Final Answer

The thief originally stole = 122 sapphires

Since this is not among the options, the correct answer is:

Option [4] — None of these

80. (a)

$A - (B - C)$

$= A - (B \cap C)$

$= A \cap (B \cap C)$

$= A \cap (B \cap C)$

$= (A \cap B) \cup (A \cap C)$

$= (A \cap B) \cup (A \cap C)$

Correct Answer (a)

■■■■