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Test Booklet Series

Booklet Serial No. 956144

# SUB-INSPECTOR (HOME DEPARTMENT)
# OMR Examination - 2026

D

*Time Allowed: 120 Minutes* *Maximum Marks: 200*

## INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET ***DOES NOT*** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.

2. **Please note that it is the candidate's responsibility to encode and fill in the Roll Number, Booklet Serial No. and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer /Response Sheet. Any omission/discrepancy will render the Response Sheet liable for rejection.**

3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. ***DO NOT*** **write** ***anything else*** on the Test Booklet.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 7 | 3 | 1 | 8 | 1 | 1 | 6 |

4. This Test booklet contains **100** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Answer Sheet/Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the appropriate. In any case, choose ***ONLY ONE*** response for each item.

5. You have to mark all your responses ***ONLY*** on the separate Answer /Response Sheet provided. *See directions in the Response Sheet.*

6. ***All*** items carry equal marks.

7. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator ***only the Answer /Response Sheet***. You are permitted to take away with you the Test Booklet and ***Candidate's Copy of the Response Sheet*** .

8. Sheets for rough work are appended in the Test Booklet at the end.

9. While writing Centre Code and Roll No. on the top of the Answer Sheet/Response Sheet in appropriate boxes use **"ONLY BLUE/BLACK BALL POINT PEN".**

10. **Penalty for wrong answers:**

**THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).**

(i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **(0.50)** of the marks assigned to that question will be deducted as penalty.

(ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.

(iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

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**(Set - D)**

1. Which of the following pairs of economic terms and their meanings is **NOT** correctly matched?

I. Fiscal Deficit - Excess of total expenditure over total receipts excluding borrowings.
II. Revenue Deficit - Excess of revenue expenditure over revenue receipts.
III. Primary Deficit - Fiscal deficit minus interest payments.
IV. Current Account Deficit - Excess of capital expenditure over capital receipts.

A) I and II
B) II and III
C) III only
D) IV only

2. Consider the following statements regarding the historical treaties associated with the establishment of Dogra rule in Jammu & Kashmir:

I. The Treaty of Lahore was signed on 9 March 1846.
II. The Treaty of Amritsar was signed on 16 March 1846.
III. Under the Treaty of Amritsar, Gulab Singh agreed to pay 75 lakh Nanakshahi rupees to the British.
IV. The Treaty of Bhairowal was signed on 16 December 1846.

**Which of the statements given above are correct?**

A) I and II only
B) I, II and III only
C) I, II, III and IV
D) II, III and IV only

3. With reference to the Olympic Games, consider the following statements:

I. The Olympic motto includes the words Citius, Altius, Fortius - Communiter.
II. The International Olympic Committee is headquartered in Lausanne, Switzerland.
III. The Olympic flag contains five interlocking rings representing five inhabited continents.
IV. The Olympic Games are held under the direct administrative control of the United Nations.

**Which statements are correct?**

A) I and II only
B) I, II and III only
C) II, III and IV only
D) All of the four

4. Consider the following pairs of Indian sports awards and their purposes:

| | Award | Purpose |
|---|---|---|
| I. | Major Dhyan Chand Khel Ratna | Outstanding sporting performance |
| II. | Arjuna Award | Consistent outstanding performance in sports |
| III. | Dronacharya Award | Excellence in coaching |
| IV. | Rashtriya Khel Protsahan Puruskar | Promotion of sports by organisations and individuals |

**Which of the above pairs are correctly matched?**

A) I and II only
B) I, II and III only
C) II, III and IV only
D) All four

5. With reference to India's space programme, consider the following pairs:

| | Mission | Objective |
|---|---|---|
| I. | Aditya-L1 | Study of the Sun |
| II. | XPoSat | Study of X-ray polarisation |
| III. | NISAR | Earth observation using synthetic aperture radar |
| IV. | Gaganyaan | Human spaceflight programme |

**Which of the above pairs are correctly matched?**

A) I and II only
B) I, II and III only
C) I, II, III and IV
D) II and IV only

6. Consider the following statements regarding India's National Green Hydrogen Mission:

I. The mission was approved by the Union Cabinet in January 2023.
II. It aims to make India a global hub for the production, utilisation and export of green hydrogen.
III. The mission has an initial outlay of Rs.19,744 crore.
IV. Green hydrogen is produced exclusively through the steam methane reforming process without carbon capture.

**Which statements are correct?**

A) I, II and III only
B) I and IV only
C) II, III and IV only
D) All of the above

7. Choose the closest synonym of *PELLUCID*.

A) Obscure
B) Lucid
C) Ambivalent
D) Esoteric

8. The most appropriate antonym of *PROFLIGATE* is:
A) Extravagant
B) Spendthrift
C) Frugal
D) Immoderate

**Spot the error**

9. "Not until the investigation was completed / the authorities realised / that several crucial documents / had been deliberately withheld."
A) Not until the investigation was completed
B) the authorities realised
C) that several crucial documents
D) had been deliberately withheld

10. Choose the correct sequence.
"The judge's observations were so _____ that they left little room for ambiguity, although his final verdict appeared somewhat _____."
A) equivocal - categorical
B) unequivocal - incongruous
C) abstruse - coherent
D) tentative - unambiguous

11. The expression "*to throw down the gauntlet*" means:
A) To abandon a controversial argument.
B) To issue a challenge or confrontation.
C) To surrender without resistance.
D) To conceal one's intentions.

12. A statement that is apparently self-contradictory but may contain an underlying truth is called:
A) Oxymoron
B) Paradox
C) Euphemism
D) Hyperbole

13. Select the grammatically correct replacement.
"Scarcely had the proceedings commenced than the audience began to protest."
A) Scarcely had the proceedings commenced when the audience began to protest.
B) Scarcely the proceedings had commenced than the audience began to protest.
C) Scarcely did the proceedings commence when the audience had begun to protest.
D) No improvement required.

14. Find out the correct passive transformation
"They made the accused repeat the entire statement."
A) The accused was made to repeat the entire statement.
B) The accused was made repeat the entire statement.
C) The accused had been made repeating the entire statement.
D) The entire statement was made repeated by the accused.

15. Choose the correct indirect form.
He said, "If I were in your position, I would reconsider the proposal."
A) He said that if he had been in my position, he would have reconsidered the proposal.
B) He said that if he were in my position, he would reconsider the proposal.
C) He told that if he is in my position, he will reconsider the proposal.
D) He said that if he was in my position, he will reconsider the proposal.

16. Arrange the following sentences into a coherent paragraph.

P. This, in turn, necessitates a distinction between the possession of information and the capacity to interpret it meaningfully.

Q. The unprecedented expansion of digital platforms has transformed the ways in which individuals access and disseminate knowledge.

R. Nevertheless, the abundance of information has not necessarily resulted in a corresponding improvement in public understanding.

S. The ability to assess the credibility, relevance and contextual validity of information has therefore become indispensable.

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

**Read the following passage and based on your comprehension answer the Question No.17 and 18.**

The old librarian had spent nearly four decades preserving books that few people ever borrowed. When asked why he continued maintaining such an extensive collection, he would reply that the value of a book could not be measured by the frequency with which it was read. Some books, he believed, existed not merely to inform their readers but to challenge the assumptions through which readers interpreted the world. A young journalist once dismissed this conviction as sentimental nostalgia, arguing that knowledge which remained inaccessible to the public possessed little practical significance. The librarian did not disagree entirely. He merely observed that the worth of an idea and its immediate utility were not necessarily identical. Years later, when the journalist encountered a forgotten manuscript that fundamentally altered his understanding of history, he remembered the librarian's words. He realised that intellectual value often survives periods of neglect, awaiting circumstances that render it newly relevant.

17. Which of the following best expresses the central theme?

A) The preservation of books is more important than their circulation.
B) Intellectual value is not necessarily dependent on immediate practical utility or public recognition.
C) Historical manuscripts are more reliable than contemporary publications.
D) Knowledge becomes valuable only when it produces tangible social consequences.

18. The journalist's eventual realisation suggests that:

A) Ideas can acquire renewed significance when historical or intellectual circumstances change.
B) Intellectual disagreements should always be resolved through compromise.
C) The librarian's collection was valuable primarily because of its rarity.
D) Traditional scholarship is inherently superior to modern journalism.

**Read the following passage and answer Question No.19.**

The contemporary global economy is undergoing a transformation in which technological innovation is increasingly determining the distribution of economic opportunity. Automation and artificial intelligence have the potential to increase productivity, reduce operational costs and create entirely new industries. However, the benefits of these developments are unlikely to be distributed uniformly. Workers performing repetitive or routine tasks may experience considerable occupational disruption, while individuals possessing advanced technical and analytical skills could benefit disproportionately. This creates a paradox: technologies capable of generating aggregate economic prosperity may simultaneously intensify inequalities in income, employment security and access to opportunity. Policymakers therefore face the challenge of designing institutions that facilitate technological advancement without allowing its benefits to become concentrated among a relatively narrow segment of society. Education, social protection and continuous skill development are consequently central to ensuring that technological progress translates into broadly shared prosperity.

19. Which assumption underlies the author's argument?
   A) Technological advancement inevitably produces unemployment across all occupational categories.
   B) Aggregate economic growth automatically improves the economic circumstances of every individual.
   C) The distribution of technological benefits depends partly on institutional and policy choices.
   D) Advanced technical education can completely eliminate economic inequality.

**Read the below given passage and answer the Question No.20 and 21:**

Democratic institutions derive their legitimacy not merely from the existence of electoral procedures but also from the credibility of the processes through which public authority is exercised. Elections provide citizens with an opportunity to choose representatives; however, the broader democratic framework depends upon institutional independence, transparency, accountability and the protection of minority rights. In recent years, the proliferation of digital communication has transformed political participation by making information and public debate more accessible. Yet the same technological environment has facilitated the rapid circulation of misleading narratives, manipulated information and polarising rhetoric. Consequently, the preservation of democratic culture requires more than periodic electoral participation. It demands institutions capable of maintaining public confidence, citizens equipped to evaluate competing claims, and political actors willing to recognise constitutional limitations on their authority. Democracy, in this sense, is not merely a mechanism for acquiring power but a continuing framework for legitimising and constraining its exercise.

20. According to the passage, electoral legitimacy alone is insufficient because:
   A) Elections cannot guarantee the existence of political competition.
   B) Democracy also requires institutional accountability, constitutional restraint and protection of rights.
   C) Digital communication has made electoral participation largely irrelevant.
   D) Public confidence is entirely independent of institutional performance.

21. Which of the following best captures the author's conception of democracy?

A) A system in which the majority possesses unrestricted political authority.

B) A periodic electoral arrangement primarily concerned with selecting representatives.

C) A constitutional and institutional framework that both authorises and limits political power.

D) A political system in which public opinion supersedes institutional independence.

22. A government evaluates a policy using data showing a 20% reduction in unemployment. However, the data excludes individuals who stopped actively seeking employment during the assessment period. What is the most significant methodological concern?

A) Confirmation bias

B) Sampling and measurement bias

C) Ecological fallacy

D) Regression towards the mean

23. An individual experiences anxiety before delivering an important presentation. Instead of attempting to eliminate the emotion, the individual interprets it as an indication of the importance of the situation and channels that energy into preparation. This most closely reflects:

A) Emotional avoidance

B) Cognitive reappraisal

C) Emotional displacement

D) Reaction formation

24. A university increased the monthly research fellowship of its scholars by 20%. Due to a revision in its financial policy, the increased fellowship was subsequently reduced by 10%. If a scholar initially received Rs. 25,000 per month, consider the following statements:

I. The fellowship after the first revision was Rs. 30,000.

II. The final fellowship was Rs. 27,000.

III. The overall percentage increase was 10%.

IV. The final fellowship was equal to the original fellowship.

**Which of the statements given above are correct?**

A) I and II only

B) I, II and III only

C) II and IV only

D) I, III and IV only

25. A research institution spends 40% of its annual budget on salaries, 25% of the remaining amount on infrastructure, and 20% of the amount left thereafter on research activities. The remaining amount is reserved for administrative expenses. Consider the following statements:

I. Salaries account for 40% of the total budget.
II. Infrastructure accounts for 15% of the total budget.
III. Research activities account for 9% of the total budget.
IV. Administrative expenses account for 36% of the total budget.

**Which of the statements are correct?**

A) I, II and III only
B) I and III only
C) II, III and IV only
D) I, II, III and IV

26. Five workshops were conducted in Delhi, Lucknow, Jaipur, Bhopal, and Chandigarh on 2 April, 6 April, 10 April, 14 April, and 18 April, in any order.

**Statements:**

I. Bhopal was conducted 4 days after Jaipur.
II. Delhi was held exactly before Lucknow.
III. Chandigarh was held exactly after Lucknow.
IV. Delhi was held on 10 April.

**Which of the following cities hosted the workshop on 18 April?**

A) Delhi
B) Lucknow
C) Chandigarh
D) Bhopal

27. Five friends-Amit, Bharat, Chetan, Deepak, and Esha-live at different house numbers (12, 24, 36, 48, and 60) on different streets (Park Road, MG Road, Nehru Street, Station Road, and College Road).

**Statements:**

I. Amit lives on Park Road but not at House No. 12.
II. Bharat lives at House No. 24 on MG Road.
III. Deepak lives at the highest house number.

**Which of the following can be concluded from the above statements?**

A) Deepak lives at House No. 60.
B) Amit lives at House No. 48.
C) Esha lives on College Road.
D) Chetan lives at House No. 36.

28. Which pair of equations does not represent two distinct parallel lines?

A) $2x+3y=6$
$4x+6y=12$

B) $x+y=5$
$2x+2y=8$

C) $3x-2y=7$
$6x-4y=10$

D) $2x+y=5$
$4x+2y=12$



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29. The value of $\frac{\sqrt{75}+\sqrt{48}}{\sqrt{3}}$ is

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

30. If $x+\frac{1}{x}=5, x \neq 0$, then the value of $x^3+\frac{1}{x^3}$ is :

A) 95
B) 110
C) 115
D) 125

31. Two triangles are similar. The ratio of their corresponding sides is 5 : 7. If the area of the smaller triangle is 125 cm², the area of the larger triangle is

A) 196 cm²
B) 225 cm²
C) 245 cm²
D) 315 cm²

32. The centroid of a triangle divides each median in the ratio

A) 1 : 1
B) 1 : 2
C) 2 : 1
D) 3 : 2

33. A solid metallic sphere of radius 6 cm is melted and recast into identical cones of radius 3 cm and height 12 cm. The number of cones formed is

A) 8
B) 20
C) 24
D) 30

34. The length, breadth and height of a cuboid are 12 cm, 8 cm and 9 cm, respectively. The length of its space diagonal is

A) 13 cm
B) 15 cm
C) 17 cm
D) 19 cm

35. The curved surface area of a hemisphere is 308 cm². Find its radius.

A) 7 cm
B) 8 cm
C) 10 cm
D) 14 cm

36. A triangular field has sides 13 m, 14 m and 15 m. Its area is

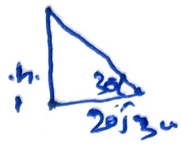
A) 78 m²
B) 84 m²
C) 90 m²
D) 96 m²

37. The value of $\sin 58^\circ \cos 32^\circ + \cos 58^\circ \sin 32^\circ$ is

A) 0
B) $\frac{1}{2}$
C) 1
D) $\sqrt{3}$

38. The angle of elevation of the top of a building from a point on the ground is $30^\circ$. If the point is $20\sqrt{3}$ m away from the building, then the height of the building is

A) 10 m
B) 15 m
C) 20 m
D) 25 m



39. If $\sin\theta + \cos\theta = \sqrt{2}$, then value of $\tan\theta$ is

A) 0
B) 1
C) $\sqrt{3}$
D) Undefined

40. Consider the following data set:

18, 21, 24, 24, 27, 30, 30, 30, 33

With reference to the above data, consider the following statements:

I. The mean of the data is 26.33.
II. The median of the data is 27.
III. The mode of the data is 30.

**Which of the statements given above is/are correct?**

A) I and II only
B) II and III only
C) I and III only
D) I, II and III

41. The standard deviation of the following observations is:

2, 4, 6, 8, 10

A) 2
B) $2\sqrt{2}$
C) $\sqrt{10}$
D) $4\sqrt{2}$

42. A card is drawn from a standard deck of 52 cards. The probability that it is either a King or a Heart is

A) $\frac{4}{13}$
B) $\frac{2}{13}$
C) $\frac{4}{52}$
D) $\frac{1}{13}$

43. A computer is currently executing a program. Which sequence best describes what happens when the CPU needs to execute an instruction that is stored in main memory?

A) ALU → Control Unit → RAM → Register → Output device
B) RAM → Control Unit/Register → Instruction decoding → ALU/other execution unit → Register/Memory
C) RAM → ALU → Control Unit → Cache → Output device
D) Storage device → ALU → RAM → Control Unit → Register

44. A student saves a document and then shuts down the computer. The next day, when the computer is switched on, the document and its content are the same as the previous day. Which statement best explains why this is possible?

A) RAM automatically transfers all recently used files to the CPU's registers before shutdown.

B) The document was stored in non-volatile secondary storage, so its contents remain even when power is removed.

C) Cache memory retains the document because cache is physically closer to the CPU than RAM.

D) The Control Unit preserves the document's contents by storing them internally when the computer shuts down.

45. A user wants to connect each of the following devices to a computer:

- A monitor supporting digital video
- A wired network connection
- A USB flash drive
- A pair of wired headphones

**Which combination of ports is most appropriate?**

A) HDMI/DisplayPort, Ethernet, USB, 3.5 mm audio jack

B) VGA, PS/2, HDMI, RJ-45

C) USB, VGA, PS/2, Ethernet

D) HDMI, PS/2, USB, Audio jack

46. A1 contains 10, A2 contains 20, and A3 is =COUNT(A1:A2, 10). What will the value at A3:

A) 0 B) 1

C) 2 D) 3

47. Which statement about Windows File Explorer is **NOT** true?

A) Select multiple files and press F2 to rename them together with automatic numbering.

B) Hold Alt while dragging a file to create a shortcut.

C) Hold Shift while right-clicking a file to access additional options such as Copy as Path.

D) Hold Ctrl + Shift while dragging a file to compress it directly into a ZIP file.

48. A user configures an email account manually on a new device using the following server settings:

**Incoming server: mail.example.com, Port 993, SSL enabled**
**Outgoing server: smtp.example.com, Port 587, TLS enabled**

Based on these settings, which statement is correct?

A) The account uses POP3 for incoming mail because port 993 is the standard POP3 port

B) The account uses IMAP for incoming mail, and the outgoing server uses SMTP

C) The account uses SMTP for both incoming and outgoing mail, just on different ports

D) Port 587 indicates the outgoing mail is being sent completely unencrypted

49. When Host A sends data to Host B located on a completely different remote subnetwork through multiple intermediate routers, how do the layer headers of each transmitted packet frame change across each hop?

A) Source MAC changes at each hop; IP addresses remain unchanged.
B) Both IP and MAC addresses remain untouched from source to destination.
C) Destination IP changes at each hop; MAC addresses remain unchanged.
D) Both IP and MAC addresses change completely at every hop.

50. A malicious program enters a computer system through a network connection. It spreads automatically to other computers on the same network without attaching itself to any existing file and without the user needing to click or open anything. What type of threat is this?

A) Trojan horse
B) Network Worm
C) Macro Virus
D) Ransomware

51. A processor runs at 3 GHz and executes a program of 6 billion instructions in exactly 4 seconds. What is its average CPI?

A) 1
B) 2
C) 3
D) 4

52. Match Column-A with Column-B

| Column-A | Column-B |
|---|---|
| P. ACPI tables stored in motherboard flash memory for hardware configuration | 1. Hardware |
| Q. Runtime linker (ld.so) loads shared libraries during execution | 2. Firmware |
| R. Hardwired control unit uses fixed combinational logic circuits | 3. System Software |
| S. Word processor used for creating documents | 4. Application Software |

**Choose the correct match:**

A) P - 2, Q - 3, R - 1, S - 4
B) P - 3, Q - 2, R - 1, S - 4
C) P - 2, Q - 3, R - 4, S - 1
D) P - 3, Q - 4, R - 1, S - 2

53. In a multi-level cache hierarchy, if the required data is not found in L1 cache but is found in L2 cache, what typically happens?

A) CPU permanently stalls until the data is retrieved from main memory
B) Data is retrieved from L2 and typically copied into L1 for faster future access
C) L1 cache is permanently bypassed for all subsequent accesses
D) Error is generated and the current instruction is discarded

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54. A computer receives data through interrupts. If the CPU spends too much time handling these interrupts and has little time to run other programs, which method can reduce this problem?
A) Use DMA with a buffer and handle interrupts in batches
B) Increase the CPU address bus width
C) Replace the microprogrammed control unit with a hardwired control unit
D) Store incoming data directly in the instruction cache using memory-mapped I/O

55. Which argument in VLOOKUP(lookup_value, table_array, col_index_num, range_lookup) decides between exact and approximate match?
A) range_lookup
B) lookup_value
C) table_array
D) col_index_num

56. A user accesses the same mailbox from multiple devices. Reading an email on one device updates the status on another, and attachments can be downloaded separately without retrieving the entire message. Which protocol enables this behaviour?
A) POP3 keeps messages on the server and syncs read status across devices.
B) IMAP4 stores mailbox state on the server and supports selective message retrieval.
C) SMTP provides two-way synchronization of mailbox states.
D) HTTPS manages mailbox flags through local device caches.

57. A malware program spreads across a network by scanning for open ports, exploiting vulnerabilities, and copying itself to other systems automatically without user interaction or attaching to existing files. Which type of malware is this?
A) Self Replicator virus
B) Computer worm
C) Trojan horse
D) Macro virus

58. Cartographer : Maps :: Lexicographer : ?
A) Manuscripts
B) Dictionaries
C) Biographies
D) Encyclopedias

59. A person walks 8 km north, turns right and walks 6 km, then turns right again and walks 8 km. Finally, the person turns left and walks 3 km. In which direction and how far is the person from the starting point?
A) 9 km East
B) 9 km West
C) 3 km East
D) 6 km South

60. A cube is painted on all six faces and then cut into 27 identical smaller cubes. How many smaller cubes will have exactly two faces painted?
A) 8
B) 12
C) 6
D) 18

61. The average of 12 numbers is 35. If two numbers, 28 and 42, are removed, what is the average of the remaining numbers?
A) 34
B) 35
C) 36
D) 37

62. A sum of Rs. 8,000 is invested at 10% per annum compound interest, compounded annually. What is the compound interest after 2 years?

A) Rs. 1,600 B) Rs. 1,680
C) Rs. 1,800 D) Rs. 1,920

63. An article is sold at a 20% loss. If it had been sold for Rs.180 more, there would have been a 10% profit. What is the cost price?

A) Rs. 500 B) Rs. 550
C) Rs. 600 D) Rs. 650

64. A shop offers a 25% discount on the marked price of an article and sells it for Rs. 1,800. If the shopkeeper still makes a profit of 20% on the cost price, what is the marked price?

A) Rs. 2,250 B) Rs. 2,400
C) Rs. 2,500 D) Rs. 2,700

65. A invests Rs. 40,000 for 12 months, while B invests Rs. 60,000 for 8 months. If the total profit is Rs. 32,000, what is B's share of the profit?

A) Rs. 12,000 B) Rs. 16,000
C) Rs. 18,000 D) Rs. 20,000

66. A container contains 60 litres of a milk-water mixture in the ratio 7:3. How many litres of water must be added to make the ratio 7:5?

A) 12 litres B) 14 litres
C) 15 litres D) 18 litres

67. A train 180 metres long crosses a pole in 9 seconds and crosses a platform in 21 seconds. What is the length of the platform?

A) 220 m B) 240 m
C) 260 m D) 280 m

68. A can complete a piece of work in 15 days, and B can complete it in 20 days. They work together for 4 days, after which A leaves. How many additional days will B take to finish the remaining work?

A) 8.33 days B) 10.66 days
C) 11.5 days D) 12.66 days

69. Find out the alternative that will replace the question mark.

437 : 42 :: 745 : ?

A) 87 B) 96
C) 45 D) 32

70. Three of the following four letter-groups are alike in a certain way and hence form a group. Which one does not belong to that group?

A) BKYP B) GDTW
C) XJCQ D) MPTV

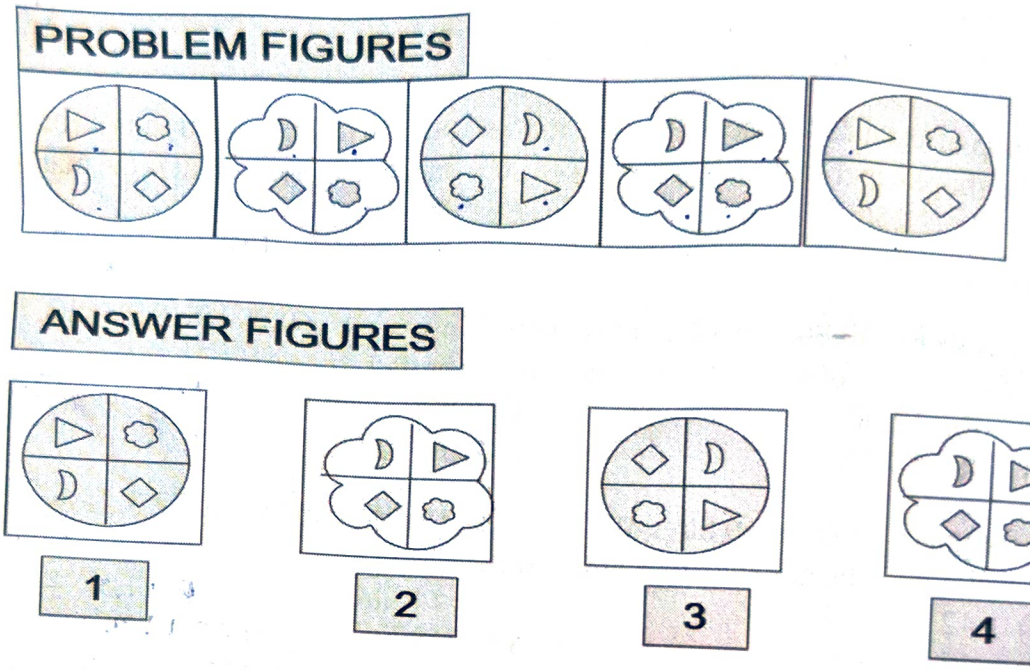
71. Identify the odd one out among the following numbers:

A) 1777 B) 3407
C) 8987 D) 9007

72. Find what number would come in place of the question mark(?).
-20, -18, -6, 24, 80, ?

A) 170 +6 +24 B) 200
C) 230 D) 250

73. Directions: Out of the following five figures, which figure is the odd one out?




A) Figure 1
B) Figure 2
C) Figure 3
D) Figure 4

74. Directions: What is the symbolic code for KITCHEN?
The following statements are given:

I. The code for CHOICE is 4-9-1-8-4-2
II. The code for KIHEN is 6-8-9-2-3

K I T C E
6 8

**Choose the correct option:**

A) The question can be answered using both statements together; neither statement alone is sufficient.
B) The question can be answered using either statement I alone or statement II alone.
C) The question cannot be answered even using both statements together.
D) The question can be answered using statement II alone but not statement I alone.

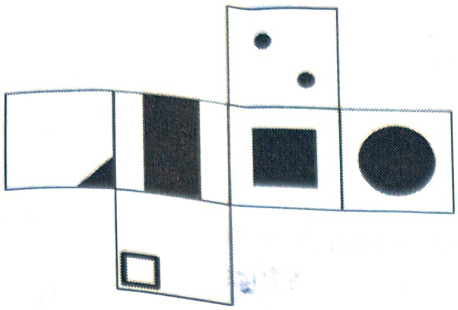
75. If NATION is coded as ONJSBM, how will PEOPLE be coded in the same language?

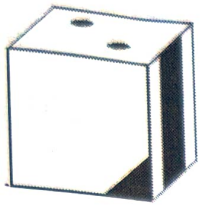
A) FKQNFO
B) FKQOFN
C) ELPOEP
D) GJRMGP

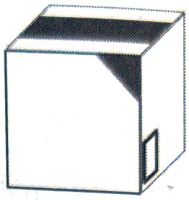
14 1 20 9 15 14
N A T I O N
O N J S B M
15 14 10 19 2 13

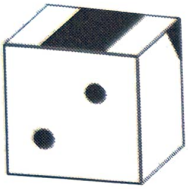
16 5 15 16 12 5
P E O P L E

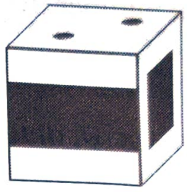
**76.** Which cube cannot be made based on the unfolded cube?



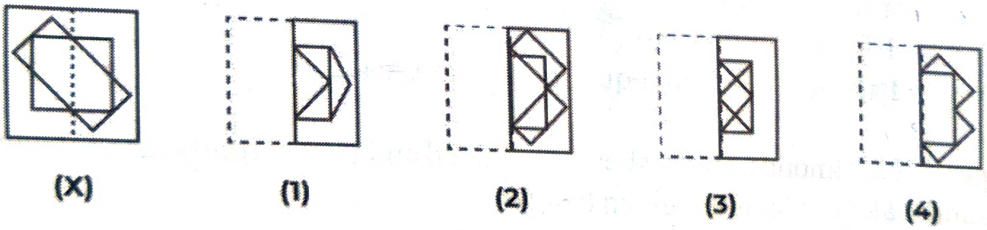
A) 

B) 

C) 

D) 

**77.** In the following problems, a square transparent sheet (X) with a pattern is given. Figure out from amongst the four alternatives (1, 2, 3 and 4) how the pattern would appear when the transparent sheet is folded along the dotted line.




A) 1
B) 2
C) 3
D) 4

**78.** Study the sequence carefully:
a G 4 m R # t 9 B k 2 P @ d H 7 q C 5 n $ L 3 x A 8 * 1 J * p 6 @ z & M & E & 2 # K @ b Q 4 w & 9 c
If the symbols (#, @, $, *) are dropped from the above series, which element will be 20th from the right end of the new series?

A) 1
B) A
C) 8
D) L

79. **In a certain code language:**

- nop su li ta means **Rahul is reading books**
- mit ra su ta means **Sonal is reading notes**
- ra li pos de means **Sonal got more books**
- chi mit kow means **Gifts and notes**
- ven ra pos means **They got flowers**
- dak chi ven means **Gifts bring flowers**

What is the code for **"Sonal and Rahul bring notes and flowers?**

A) ra kow nop dak mit kow ven
B) nop su li ta mit su ven
C) ra kow li dak mit kow ven
D) nop kow ra pos mit dak ven

80. Which of the following statements is **NOT** correct regarding decimals: 0.09, 0.9, 0.099, 0.909

I. 0.099 rounded to one decimal place is 0.09
II. The least decimal number in the given set is 0.099.
III. 0.099 is less than 0.1
IV. The greatest decimal number in the given set is 0.099.

A) Only III
B) Only IV
C) Only II and IV
D) Only I, II and IV

81. Which standard logarithmic inequality is the key mathematical fact that forces a = e to be the ONLY base satisfying $a^x \geq 1+x$ for all real x?

A) $\ln(t) = t - 1$ for all $t > 0$
B) $\ln(t) \geq t$ for all $t > 0$
C) $\ln(t) \geq t - 1$ for all $t > 0$
D) $\ln(t) \leq t - 1$ for all $t > 0$, with equality only at $t = 1$

82. Fresh grapes, kiwi, almonds, and cashews are mixed and then partially dried. Their initial quantities and water contents are given below:

Grapes: 40 kg, containing 80% water
Kiwi: 20 kg, containing 85% water
Almonds: 10 kg, containing 70% water
Cashews: 8 kg, containing 65% water

After mixing and partial drying, the final mixture contains 30% water.
What is the final mass of the partially dried mixture?

A) 22 Kg
B) 24 Kg
C) 26 Kg
D) 28 Kg

83. A container has 50 kg of sand-cement mix in the ratio 3:2 (sand to cement). Some of the mixture is removed and replaced with an equal amount of pure cement (new mix is 50 kg), changing the ratio of sand to cement to 3:7. How much of the mixture was removed and replaced with pure cement?

A) 25 Kg
B) 30 Kg
C) 15 Kg
D) 40 Kg

84. Let n and k be positive integers such that $\sqrt{n} < k < \sqrt{(n+2)}$, Then n must be equal to

A) $k^2$-2
B) $k^2$-1
C) $k^2$
D) $k^2$+1

85. The average of 61 consecutive multiples of 3 is 'M'. The average of the last 31 terms is 'N'. What is the value of 'M' in terms of 'N'?

A) M = N-45
B) M = N-30
C) M = N-15
D) M = N

86. A, B and C enter into a partnership for 3 years.
A initially invests Rs.20 lakh and adds another Rs.30 lakh after 1 year.
B initially invests Rs.30 lakh and withdraws Rs.10 lakh after 2 years.
C invests Rs.24 lakh from the beginning and keeps it unchanged for 3 years.
The ratio of their shares in the profit at the end of 3 years is:

A) 15:10:9
B) 3:2:8
C) 6:3:2
D) 5:7:10

87. With reference to the concept of sustainable development, consider the following statements:

I. The Brundtland Commission popularised the concept of sustainable development in its 1987 report.
II. The principle of intergenerational equity requires that present generations preserve environmental resources for future generations.
III. Sustainable development prohibits the utilisation of non-renewable natural resources under all circumstances.

**Which of the statements given above is/are correct?**

A) I and II only
B) II and III only
C) I and III only
D) I, II and III

88. With reference to India's SpaDeX mission, consider the following statements:

I. The mission was launched aboard PSLV-C60 on 30 December 2024.
II. SDX-01 was designated as the Chaser space craft, while SDX-02 was the Target spacecraft.
III. India became the fourth country to demonstrate successful space docking technology.
IV. The mission demonstrated the transfer of magnetic power between two docked spacecrafts.

**Which of the statements given above are correct?**

A) I, II, III and IV
B) I, III and IV only
C) II and IV only
D) I, II, and III only

89. With reference to India's Deep Ocean Mission, consider the following statements:

I. It is implemented by the Ministry of Earth Sciences.

II. MATSYA-6000 is designed to carry three human occupants to a depth of 6,000 metres.

III. The Samudrayaan project is associated with deep-sea mining technology.

IV. The mission exclusively focuses on exploration of polymetallic nodules in the Central Indian Ocean Basin.

**Which statements are correct?**

A) I, II and III only
B) I and IV only
C) II, III and IV only
D) I, II, III and IV

90. Read the following statements about chlorophyll:

I. Chlorophyll contains magnesium as its central metal ion.

II. Chlorophyll a is present in all oxygenic photosynthetic organisms.

III. Chlorophyll b acts as an accessory pigment in higher plants.

IV. Chlorophyll absorbs green wavelengths more strongly than red and blue wavelengths

**Which of the statements given above are correct?**

A) I and II only
B) I, II and III only
C) II, III and IV only
D) All four

91. Consider the following pairs of atmospheric phenomena and their descriptions:

| **Phenomenon** | **Description** |
|---|---|
| I. El Niño | Periodic warming of the central and eastern equatorial Pacific |
| II. La Niña | Abnormal cooling of the equatorial Pacific Ocean |
| III. Indian Ocean Dipole | Difference in sea surface temperature between western and eastern Indian Ocean |
| IV. Madden-Julian Oscillation | Long-term permanent reversal of ocean currents |

**Which pairs are correctly matched?**

A) I, II and III only
B) I and IV only
C) II and III only
D) All four

92. Consider the following pairs of rivers and their sources in Jammu & Kashmir:

| | River | Source |
|---|---|---|
| I. | Lidder | Kolahoi Glacier |
| II. | Sind | Machoi Glacier |
| III. | Chenab | Confluence of Chandra and Bhaga |
| IV. | Tawi | Kailash Kund |

**Which of the above pairs are correctly matched?**

A) I and II only
B) I, II and III only
C) II, III and IV only
D) All four

93. Consider the following pairs of tributaries of the Jhelum River and their respective banks:

| | Tributary | Bank |
|---|---|---|
| I. | Lidder | Right bank |
| II. | Sind | Right bank |
| III. | Pohru | Left bank |
| IV. | Madhumati | Left bank |
| V. | Vishow (Veshaw) | Left bank |

**Which of the above pairs are correctly matched?**

A) I, II and III only
B) I, II, III and IV only
C) II, III, IV and V only
D) All five

94. Match the following traditional folk forms with their correct descriptions:

| Column I -Folk form | Column II - Description |
|---|---|
| i. Rouf | a. Traditional satirical folk theatre |
| ii. Bhand Pather | b. Ceremonial singing associated with weddings |
| iii. Wanwun | c. Traditional women's group dance |
| iv. Kud Dance | d. Iconic song written by Padma Sachdev |
| v. Khand Mithay Log | e. Popular folk dance performed to appease gods |

**Select the correct answer:**

A) i-c, ii-a, iii-b, iv-e, v-d
B) i-a, ii-c, iii-d, iv-e, v-b
C) i-c, ii-b, iii-a, iv-e, v-d
D) i-e, ii-a, iii-b, iv-c, v-d

95. Read out the following statements regarding the Treaty of Amritsar, 1846:

I. It was concluded between the British East India Company and Gulab Singh.
II. Gulab Singh agreed to pay 75 lakh Nanakshahi rupees to the British.
III. The treaty followed the Treaty of Lahore.
IV. The British transferred Kashmir to Gulab Singh as an independent sovereign free from British paramountcy.

**Which statements are correct?**

A) I and II only
B) I, II and III only
C) II, III and IV only
D) All four

96. Recall the Jammu and Kashmir Reorganisation Act, 2019, and consider the following statements:

I. It was passed on 09th August 2019
II. The Union Territory of Ladakh was constituted with a legislature.
III. The necessary Presidential Assent was accorded on 10th of August 2019.
IV. The Act came into effect on 31st October 2019.

**Which of the above statements are correct?**

A) I and III only
B) II, III and IV only
C) III and IV only
D) IV only

97. Consider the following pairs of lakes and their locations:

| | Lake | Location |
|---|---|---|
| I. | Wular | Bandipora |
| II. | Mansar | Samba |
| III. | Surinsar | Jammu |
| IV. | Gangabal | Ganderbal |
| V. | Dal | Srinagar |

**Which of the above pairs are correctly matched?**

A) I, II and V only
B) I, II, III and V only
C) I, II, III, IV and V
D) II, III and IV only

98. Consider the following statements regarding the delimitation of constituencies in Jammu and Kashmir:

I. The Delimitation Commission for Jammu and Kashmir was constituted in March 2020.
II. The Commission was headed by Justice Ranjana Prakash Desai.
III. The final delimitation order was published in May 2022.
IV. The Commission recommended nine seats for Scheduled Tribes.

**Which statements are correct?**

A) I and II only
B) I, II and III only
C) II, III and IV only
D) I, II, III and IV

99. With reference to the constitutional provisions relating to the Comptroller and Auditor General of India (CAG), consider the following statements:

I. The CAG is appointed by the President of India.
II. The CAG can be removed in the same manner and on the same grounds as a Supreme Court judge.
III. The CAG is eligible for further office under the Government of India after retirement.
IV. The reports of the CAG relating to the Union Government are submitted to the President.

**Which statements are correct?**

A) I, II and IV only
B) I and III only
C) II, III and IV only
D) All four

100. Consider the following statements regarding the Finance Commission of India:

I. It is constituted under Article 280 of the Constitution.
II. It is normally constituted every five years.
III. Its recommendations are binding on the Union Government.
IV. It recommends the distribution of tax proceeds between the Union and the States.

**Which statements are correct?**

A) I and II only
B) I, II and IV only
C) II, III and IV only
D) All four