

IB Security Assistant 2025 - Practice Test

Quantitative Aptitude & Reasoning/Logical Ability - 50 Questions

Instructions: Choose the best answer for each question. Total Questions: 50

QUANTITATIVE APTITUDE SECTION

Number System & Simplification

1. What is the value of $25 \times 4 \div 5 + 12 - 8$?

- A) 24
- B) 26
- C) 28
- D) 30

2. Simplify: $(64 \times 25) \div 16$?

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

3. Find the value of $3^3 + 2t - 5^2$?

- A) 18
- B) 20
- C) 22
- D) 24

Percentages & Averages

4. If 25% of a number is 45, what is 60% of that number?

- A) 108
- B) 110
- C) 112
- D) 115

5. The average of 5 numbers is 20. If one number is removed, the average becomes 18. What is the removed number?

- A) 25
- B) 26
- C) 27
- D) 28

6. A student scored 80%, 75%, and 85% in three tests. What percentage should he score in the fourth test to have an average of 82%?

- A) 88%
- B) 89%
- C) 90%
- D) 92%

Profit, Loss & Discount

7. An article is sold for ₹1720 after giving a discount of 10%. What was the

- A) ₹1780
- B) ₹1800
- C) ₹1820
- D) ₹1850

8. If the cost price is ₹1400 and profit is 25%, what is the selling price?

- A) ₹1480
- B) ₹1500
- C) ₹1520
- D) ₹1540

Simple & Compound Interest

9. Find the simple interest on ₹12000 for 3 years at 8% per annum?

- A) ₹1460
- B) ₹1480
- C) ₹1500
- D) ₹1520

10. What will be the compound interest on ₹11000 for 2 years at 10% per annum?

- A) ₹1200
- B) ₹1210
- C) ₹1220
- D) ₹1230

Ratio, Proportion & Partnership

11. If $A:B = 3:4$ and $B:C = 2:3$, find $A:B:C$?

- A) 3:4:6
- B) 6:8:12
- C) 9:12:18
- D) 3:4:3

12. A and B invest ₹3000 and ₹4000 respectively for 1 year. If profit is ₹1210

- A) ₹1800
- B) ₹1900
- C) ₹11000
- D) ₹11100

Time, Speed & Distance; Time & Work

13. A car travels 240 km in 4 hours. What is its speed?

- A) 50 km/h
- B) 55 km/h
- C) 60 km/h

D) 65 km/h

14. A can complete a work in 12 days, B in 15 days. How many days will they take together?

A) 6

B) 6.67

C) 7

D) 7.5

15. Two trains running in opposite directions with speeds 50 km/h and 70 km/h cross each other in 12 seconds. What is the sum of their lengths?

A) 400m

B) 450m

C) 500m

D) 550m

Mensuration & Geometry

16. Find the area of a circle with radius 7 cm using $\pi = 22/7$?

A) 154 sq cm

B) 144 sq cm

C) 164 sq cm

D) 174 sq cm

17. What is the perimeter of a rectangle with length 12 cm and breadth 8 cm?

A) 40 cm

B) 42 cm

C) 44 cm

D) 46 cm

Mixture & Alligation

18. In what ratio should tea at 160 per kg be mixed with tea at 180 per kg to get a mixture at 170 per kg?

A) 1:1

B) 1:2

C) 2:1

D) 3:2

19. A mixture contains milk and water in the ratio 3:2. If 5 liters of water is added, the ratio becomes 3:3. Find the original quantity of mixture?

A) 20 liters

B) 25 liters

C) 30 liters

D) 35 liters

Data Interpretation

20. In a bar chart, if the height of bar A is 40 units and represents 200 items, what do 60 units represent?

A) 250 items

- B) 300 items
- C) 350 items
- D) 400 items

21. A pie chart shows 30% for section A. If the total value is 1200, what is the value of section A?

- A) 300
- B) 320
- C) 350
- D) 360

22. In a line graph, if values increase from 50 to 80 over 2 years, what is the percentage increase?

- A) 30%
- B) 40%
- C) 50%
- D) 60%

23. A table shows sales for Jan (100), Feb (150), Mar (200). What is the average monthly sale?

- A) 140
- B) 145
- C) 150
- D) 155

Probability, Permutation & Combination

24. What is the probability of getting a head when a fair coin is tossed?

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

REASONING/LOGICAL ABILITY SECTION

Coding-Decoding

25. If COMPUTER is coded as RFUVQNPC, how is PROBLEM coded?

- A) MELBORP
- B) SPMCOFN
- C) CQPCMFN
- D) MCOLREP

26. In a certain code, FRIEND is written as GSJFOE. How is MOTHER written?

- A) NPUIFS
- B) NPUTFS
- C) NPUIFS
- D) NQPUFS

27. If CAT = 312, DOG = 416, what is the code for BIRD?

- A) 2189

- B) 2918
- C) 1829
- D) 8192

Blood Relations

28. A is B's sister. C is B's mother. D is C's father. E is D's mother. How is A related to D?

- A) Granddaughter
- B) Daughter
- C) Sister
- D) Niece

29. Pointing to a woman, Ram said 'She is the daughter of my wife's mother-in-law'. How is the woman related to Ram?

- A) Wife
- B) Sister-in-law
- C) Mother
- D) Daughter

Syllogism

30. All books are papers. Some papers are files. Conclusion: Some books are files?

- A) True
- B) False
- C) Cannot be determined
- D) Partially true

31. No cat is a dog. All dogs are animals. Conclusion: No cat is an animal?

- A) True
- B) False
- C) Cannot be determined
- D) Partially true

Direction & Distance

32. A man walks 10m north, then 10m east, then 10m south. How far is he from the starting point?

- A) 10m east
- B) 10m west
- C) 10m north
- D) 10m south

33. If you are facing north and turn 90° clockwise, then 180°, which direction are you facing?

- A) North
- B) South
- C) East
- D) West

Series (Numbers/Alphabet)

34. Find the next term: 2, 6, 18, 54, ?

- A) 108
- B) 162
- C) 216
- D) 324

35. Complete the series: ACE, BDF, CEG, ?

- A) DFH
- B) DEH
- C) CFH
- D) DGI

36. What comes next: Z, Y, X, W, ?

- A) V
- B) U
- C) T
- D) S

Classification/Odd one out

37. Find the odd one: Dog, Cat, Lion, Table?

- A) Dog
- B) Cat
- C) Lion
- D) Table

38. Which number is different: 121, 144, 169, 180?

- A) 121
- B) 144
- C) 169
- D) 180

Puzzles & Arrangements

39. Five friends A, B, C, D, E are sitting in a row. A is not at either end. B is to the immediate left of E. Who can be at the left end?

- A) A or D
- B) C or D
- C) B or C
- D) A or B

40. In a code, if 1=A, 2=B, 3=C, what does 7-15-18-12-4 represent?

- A) WORLD
- B) GLOBE
- C) EARTH
- D) SPACE

41. Six people are sitting around a circular table. If A sits opposite to D, and B sits to the immediate right of A, where does C sit?
- A) Opposite to B
 - B) Between D and E
 - C) Cannot be determined
 - D) Next to D

42. If ROSE is 1234 and POSE is 5234, what is CODE?
- A) 6374
 - B) 6724
 - C) 7234
 - D) Cannot be determined

Mirror/Water Images

43. What is the mirror image of 'PROBLEM'?
- A) M -!C d O /§ü
 - B) MELBORQ
 - C) QROBLEM
 - D) M E L B O ? >

Data Sufficiency

44. What is the age of Ravi? Statement 1: Ravi is 5 years older than Savi. Statement 2: Savi is 20 years old?
- A) Statement 1 alone sufficient
 - B) Statement 2 alone sufficient
 - C) Both statements needed
 - D) Neither sufficient

Venn Diagrams

45. In a group of 50 students, 30 like cricket, 25 like football, and 10 like both. How many like neither?
- A) 5
 - B) 10
 - C) 15
 - D) 20

Additional Questions

46. If MACHINE is coded as 13-1-3-8-9-14-5, what is the code for ENGINE?
- A) 5-14-7-9-14-5
 - B) 5-14-20-9-14-5
 - C) 5-14-9-9-14-5
 - D) 5-14-7-8-14-5
47. Complete the analogy: Book : Author :: Painting : ?
- A) Canvas

- B) Brush
- C) Artist
- D) Color

48. In a certain language, STRONG is TSRONQ. How is PEOPLE written?

- A) EOELPP
- B) EOPLEP
- C) PEOPEL
- D) LPOEPE

49. If the day before yesterday was Thursday, what day will it be day after tomorrow?

- A) Sunday
- B) Monday
- C) Tuesday
- D) Wednesday

50. A clock shows 3:15. What is the angle between the hour and minute hands?

- A) 0°
- B) 7.5°
- C) 15°
- D) 22.5°

ANSWER KEY

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|-------|-------|-------|-------|-------|
| 1. A | 11. A | 21. D | 31. B | 41. C |
| 2. A | 12. B | 22. D | 32. A | 42. D |
| 3. A | 13. C | 23. C | 33. D | 43. A |
| 4. A | 14. B | 24. C | 34. B | 44. C |
| 5. D | 15. A | 25. B | 35. A | 45. A |
| 6. A | 16. A | 26. C | 36. A | 46. A |
| 7. B | 17. A | 27. A | 37. D | 47. C |
| 8. B | 18. A | 28. A | 38. D | 48. B |
| 9. B | 19. B | 29. B | 39. B | 49. B |
| 10. B | 20. B | 30. B | 40. A | 50. B |