

IBPS RRB Officer Scale 1 Exam Model Paper

Test I : Quantitative Aptitude

Q1. A project manager hired 16 men to complete a project in 40 days. However after 30 days he realized that only $\frac{4}{9}$ th of the work is complete. How many more men does he need to hire to complete the project on time ?

- A)30
- B)32
- C)44
- D)40

Q2. A circular garden has a path of uniform width around it. The difference between outer and inner circumference of the circular path is 210cm. Find its width.

- A)33.44cm
- B)30.34cm
- C)40.24cm
- D)28.64cm
- E)None of these

Q3. There is meeting of 20 delegates is to be held in a hotel. In how many ways these delegates can be seated along a round table, if three particular delegates always seat together.

- A) $17! \cdot 3!$
- B) $18! \cdot 3!$
- C) $17! \cdot 4!$
- D) $18! \cdot 4!$
- E) Can't be determined

Q4. Two alloys contain gold and silver in the ratio of 3:7 and 7:3 respectively. In what ratio these alloys must be mixed with each other so that we get an alloy of gold and silver in the ratio of 2:3?

- A.2:1
- B.3:1
- C.4:3
- D.3:5
- E.None of these

Q5. A man can row 24 kmph in still water. It takes him thrice as long to row up as to row down the river. Find the rate of the stream?

- A) 4 kmph B) 12 kmph
- C) 6 kmph D) 1 kmph
- E) 7kmph

Q6. What should come in place of question mark (?) in the following number series?

8 6 ? 23 87 429

- A) 12
- B) 8
- C) 10
- D) 14
- E) None of these

Q7. What value will come in place of question mark (?) in the number-series given below?

28 80 232 684 ? 6088

- A) 2038
- B) 2036
- C) 2050
- D) 2032
- E) None of these

Q8. The next number of the sequence 3,5,9,17,33.... is?

- A) 50
- B) 49
- C) 65
- D) 60
- E) None of these

Q9. What should come in place of the question mark (?) in the following number series?

0 1 29 3628 3629 ?

- A) 97025
- B) 97875
- C) 95801
- D) 96705
- E) None of these

Q10.What value will come in place of question mark (?) in the number-series given below?

325, 314, 292, 259, 215, ?

- (A) 126
- (B) 116
- (C) 130
- (D) 160
- (E) None of these

Directions (Q91-95): What will come in place of the question mark (?) in the following questions?

Q11. $1984 + 523 - ? = 1899$

- A) 718
- B) 608
- C) 708
- D) 618
- E) None of these

Q12. $460 \times 15 - 5 \times 20 = ?$

- A) 92000
- B) 4600
- C) 137800
- D) 7000
- E) None of these

Q13. $4 \frac{1}{5} \times 3 \frac{1}{3} + ? = 20\%$ of 120

- A) 11
- B) 10
- C) 5
- D) 15
- E) None of these

Q14. $4848 \div 24 \times 11 - 222 = ?$

- A) 200
- B) 2444
- C) 2000
- D) 2100
- E) None of these

Q15. $\sqrt{2809} = ?$

- A) 43
- B) 47
- C) 57
- D) 53
- E) None of these

Q16. In the following question, two equations numbered (i) and (ii) are given. You have to solve both the equations and choose the correct option.

(i) $18x^2 + 18x + 4 = 0$

(ii) $12y^2 - 22y + 8 = 0$

- (A) $x > y$
- (B) $x \geq y$
- (C) $x < y$
- (D) $x \leq y$

(E) $x = y$ or the relationship cannot be established

Q17. In the following question, two equations numbered (i) and (ii) are given. You have to solve both the equations and choose the correct option.

(i) $8x + 6x = 5$

(ii) $12y - 22y + 8 = 0$

- (A) $x > y$
- (B) $x \geq y$
- (C) $x < y$
- (D) $x \leq y$
- (E) $x = y$ or the relationship cannot be established

Q18. In the following question, two equations numbered (i) and (ii) are given. You have to solve both the equations and choose the correct option.

(i) $17x + 48x = 9$

(ii) $13y = 32y - 12$

- (A) $x > y$
- (B) $x \geq y$
- (C) $x < y$
- (D) $x \leq y$
- (E) $x = y$ or the relationship cannot be established

Q19. In the following question, two equations numbered (i) and (ii) are given. You have to solve both the equations and choose the correct option.

I. $\sqrt{1225}x + \sqrt{4900} = 0$

II. $(81y)^{1/4} + (343)^{1/3} = 0$

- (A) $x > y$
- (B) $x \geq y$
- (C) $x < y$
- (D) $x \leq y$
- (E) $x = y$ or the relationship cannot be established

Q20. In the following question, two equations numbered (i) and (ii) are given. You have to solve both the equations and choose the correct option.

I. $x^2 - 7x + 12 = 0$

II. $y^2 - 9x + 20 = 0$

- (A) $x > y$
- (B) $x \geq y$
- (C) $x < y$
- (D) $x \leq y$

(E) $x = y$ or the relationship cannot be established

Q21. In a test consisting of 80 questions carrying one mark each, Arpita answers 65% of the first 40 questions correctly. What percent of the other 40 questions must be done correctly to score 75 % of the whole test?

- (A) 60
- (B) 80
- (C) 75
- (D) 40
- (E) None of these

Q22. In a bag, there are coins of 25 p, 10 p, and 5 p in the ratio of 1 : 2 : 3. If there are Rs.30 in all, how many 5 p coins are there?

- A) 50
- B) 100
- C) 150
- D) 200
- E) 300

Q23. A train passes a station platform in 36 seconds and a man standing on the platform in 20 seconds. If the speed of the train is 54 km/hr, what is the length of the platform?

- A) 120 m
- B) 240 m
- C) 300 m
- D) 350 m
- E) 340 m

Q24. In what time will Rs.15625 amount to 17576 at 8% compound interest per annum, interest being compounded half-yearly

- A) 3 yr
- B) 2 yr
- C) 1 yr
- D) 1/2 yr
- E) None of these

Q25. An urn contains 9 blue, 7 white and 4 black balls. If 2 balls are drawn at random, then what is the probability that only one ball is white?

- A) 71/190
- B) 121/190

- C) 91/190
- D) 93/190
- E) None of these

Directions (Q26-30): Study the information carefully to answer the following questions.

A college has many streams in graduate viz, Science, Commerce and Arts. Among the total number of students in the college 45% are girls. Number of boys studying in Science stream which is 297, is 30% of the total numbers of boys in the college. 40% of the girls are studying in Arts stream. Number of boys and girls studying in Science stream are in the ratio 3 : 2. 50% of boys are studying in Commerce streams.

Q26. How many girls are studying in Commerce stream?

- (A) 120 (B) 160 (C) 150 (D) 190 (E) None of these

Q27. The number of girls studying Science stream is what percent of the number of boys studying in Commerce stream?

- (A) 35% (B) 30% (C) 40% (D) 55% (E) None of these

Q28. The number of boys studying in Commerce is what percent of the total number of students in the college?

- (A) 36.33% (B) 27.5% (C) 48.9% (D) 14.90% (E) None of these

Q29. What is the respective ratio between number of boys and girls in Arts stream?

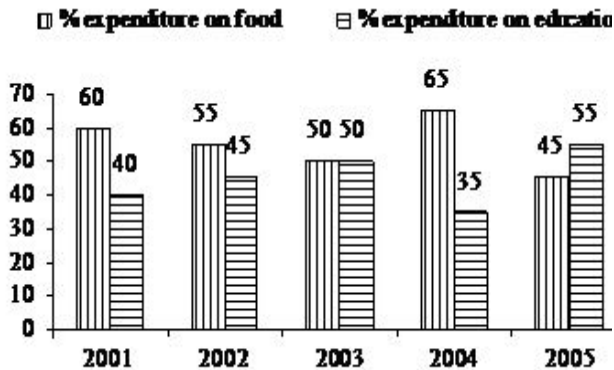
- (A) 5 : 7 (B) 15 : 32 (C) 88 : 101 (D) 11 : 18 (E) None of these

Q30. What is the total number of students in the college ?

- (A) 1200 (B) 1600 (C) 1800 (D) 1500 (E) None of these

Directions (31-35): The given bar-graph shows the percentage expenditure of a person on food and education items for five years and the table given below shows the total

expenditure of that person for these five years.



Year	Total Expenditure
2001	4000
2002	4400
2003	5000
2004	5600
2005	6000

Q31. In which year the man spent highest amount on food?

- (A) 2001 (B) 2002 (C) 2003 (D) 2004 (E) 2005

Q32. In which year the man spent least amount on education?

- (A) 2001 (B) 2002 (C) 2003 (D) 2004 (E) 2005

Q33. In which year there was the highest increase over the preceding year in the amount at money spend on food?

- (A) 2001 (B) 2002 (C) 2003 (D) 2004 (E) 2005

Q34. In which year there was the highest increases over the preceding year in the amount of money spend on education?

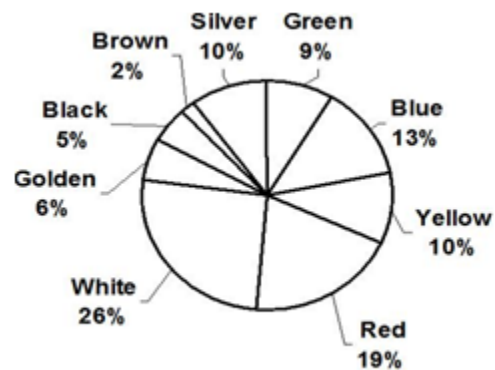
- (A) 2001 (B) 2002 (C) 2003 (D) 2004 (E) 2005

Q35. What is the difference between average money spent on food and education in the period of 2000–2005?

- (A) 200 (B) 380 (C) 464 (D) 544 (E) None of these

Directions (Q36-40): Study the chart and give the answer of following question.

Selling of the cars in U.K. according to the colour.



Q36. 50% of all the cars consisted on which of the following colours of car?

- (A) Black, Golden, Blue, Red
 (B) Blue, Black, Red, Yellow
 (C) White, Golden, Blue, Black
 (D) White, Blue, Green, Black
 (E) None of these

Q37. Cars of which colour are 20% less popular than white coloured cars?

- (A) Black
 (B) Golden
 (C) Red
 (D) Blue
 (E) None of these

Q38. Which colour of cars has the percentage equal to the $69 \frac{3}{13}$ of Blue colourcars ?

- (A) Brown
 (B) Golden
 (C) Green
 (D) Red

(E) None of these

Q39. Cars of which colour when increased by 2 percent and then combined with that of Red cars will make 30 percent of the total?

(A) Golden

(B) Blue

(C) Black

(D) Yellow

(E) None of these

Q40. If in a certain period the total production of all cars was 95400 then how many more blue cars were sold than green?

(A) 2580

(B) 3618

(C) 2850

(D) 3816

(E) None of these

Test II : Reasoning

Directions (Q. 41-45): Study the following information to answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement. (All the numbers are two-digit numbers.

Input: yellows jacket 47 cabinet total 21 correct sunny thief 77.

Step I: 21 total yellows jacket 47 cabinet correct sunny thief 77

Step II: 21 total 47 jacket yellows cabinet correct sunny thief 77

Step III: 21 total 47 jacket 77 thief yellows cabinet correct sunny

Step IV: 21 total 47 jacket 77 thief yellows sunny cabinet correct

Step V: 21 total 47 jacket 77 thief yellows sunny correct cabinet

Steps V: is the last step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the following input.

Input: union missed 86 chair 24 airlift liverpool beneath humble 12 everyday.

Q41. Which step number will be the following output?

12 humble 24 chair 86 missed union airlift liverpool beneath everyday.

A) Step II

B) Step III

C) Step IV

D) There will be no such step.

E) None of the above

Q42. How many steps will be required to get the final output?

A) Five

B) Six

C) Seven

D) Four

e) None of the above

Q43. Which word/number would be the fifth from the right in Step V?

A) missed

B) union

C) 86

D) Liverpool

E) None of the above

Q44. What is the position of 'beneath' in Step IV?

A) 9th from the left

B) 11th from the left

C) 2nd from the right

D) 4th from the right

E) None of the above

Q45. If in a certain way 'humble' is related to 'airlift' and 'chair' is related to 'beneath' then 'missed' would be related to which of the following in the last step?

A) 24

B) union

C) everyday

D) liverpool

E) None of the above

Directions (Q46-50): In each question below are given three statements followed by three conclusions numbered I, II and III. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically

follows from the given statements disregarding commonly known facts.

Q46. Statements:

Some cars are trucks.

No train is a truck.

Some trains are jeeps.

Conclusions:

I. Some jeeps are not trucks.

II. Some cars are not trains.

III. Some jeeps are trains.

A) Only I and II follow

B) All I, II and III follow

C) None follows

D) Only III follows

E) None of the above

Q47. Statements:

All flowers are grasses.

No grass is a leaf.

Some leaves are plants.

Conclusions:

I. All grasses being flowers is a possibility.

II. All plants being leaves is a possibility.

III. Some leaves are not grasses.

A) Only I and III follow

B) Only I and II follow

C) Only III follows

D) All follow

E) None of the above

Q48. Statements:

All trees are branches.

Some branches are seeds.

No fruit is a tree.

Conclusions:

I. Some branches are not fruits.

II. Some seeds are branches.

III. Some seeds being trees is a possibility.

A) Only I and II follow

B) Only III follows

C) Only II follows

D) Only II and III follow

E) All follow

Q49. Statements:

No mouse is a keyboard.

No keyboard is a computer.

All wires are computers.

Conclusions:

I. No mouse is a computer.

II. No keyboard is a wire.

III. No computer is a keyboard.

A) Only I and II follow

B) Only II follows

C) Only II and III follow

D) Only III follows

E) None of the above

Q50. Statements:

Some spoons are bowls.

All bowls are plates.

Some glasses are spoons.

Conclusions:

I. Some glasses are bowls.

II. Some plates are bowls.

III. At least some glasses are plates.

A) Only II follows

B) Only II and III follow

C) Only III follows

D) None follows

E) None of the above

Directions (Q.51-55): Study the following information carefully and answer the questions given below

P, Q, R, S, T, V, W and Z are eight friends studying in three different engineering colleges - A, B and C in three disciplines - Mechanical, Electrical and Electronics with not less than two and not more than three in any college. Not more than three of them study in any of the three disciplines. W studies Electrical in college B with only T, who studies Mechanical. P and Z do not study in college C and study in the same discipline but not Electrical. R studies Mechanical in college C with V, who studies Electrical. S studies Mechanical and does not study in the same college where R studies. Q does not study Electronics.

Q51. Which of the following combinations of college-student-specialization is correct?

A) C-R-Electronics

B) A-Z-Electrical

C) B-W-Electronics

D) B-W-Electrical

E) B-Z-Electronics

Q52. In which of the following colleges do two students study in Electrical discipline?

A) A only

B) B only

- C) C only
- D) Cannot be determined
- E) None of these

Q53. In which discipline does Q study?

- A) Electrical
- B) Mechanical
- C) Electrical or Mechanical
- D) Data inadequate
- E) None of these

Q54. In which of the colleges at least one student studies in Mechanical discipline?

- A) A only
- B) B only
- C) C only
- D) Both A and B
- E) All A, B and C

Q55. S studies in which college?

- A) A
- B) B
- C) A or B
- D) Data inadequate
- E) None of these

Directions (Q.56-60): Study the given information carefully and answer the given questions

In a certain code language "find a good home" is written as "dn co he rh", "charity begins at home" is written as " rhnaeksa", "find good charity store" is written as "nadn he ku" and " a store at station" is written as "co ekkuze".(All codes are two letter only).

Q56. What does the code 'ze' stand for in the given code language?

- A) good
- B) station
- C) find
- D) store
- E) begins

Q57. What does the code for 'store' in the given code language?

- A) rh
- B) ek
- C) ku
- D) ze
- E) dn

Q58. What does the code 'ek' stand for in the given language code?

- A) store
- B) at
- C) charity
- D) either 'find' or 'good'
- E) a

Q59. In the given code language, which of the following possibly means 'find good food'?

- A) hednku
- B) rhdn he
- C) dnbk he
- D) kuekna
- E) narhek

Q60. What is the code for 'charity' in the given code language?

- A) na
- B) ku
- C) he
- D) rh
- E) dn

Directions (Q61-65): Study the following information carefully and answer the questions given below.

Eight friends Albert, Hawkins, Federal, Nicotine, Martin, Edward, Luther and Alice are sitting around a circle facing towards the centre. Four out of the eight friends drive a ship while four drive an airplane. No two friends who drive a ship are immediate neighbours of each other. Albert, who drives a ship sits third to left of Alice. Luther, who drives an airplane sits second to right of Martin. Edward and Federal are immediate neighbours of each other. Edward does not drive a ship. Hawkins is an immediate neighbour of Edward but not of Alice.

Q61. Which of the following is true about Nicotine?

- (A) Nicotine drives an airplane
- (B) Alice and Martin are immediate neighbours of Nicotine
- (C) Alice sits third to left of Nicotine
- (D) Nicotine sits second to the left of Federal
- (E) None is true

Q62. In which of the following pairs do both the members drive an airplane?

- (A) Edward, Nicotine
- (B) Hawkins, Nicotine
- (C) Edward, Federal

- (D) Alice, Hawkins
- (E) Martin, Alice

Q63. Four of the following five are alike in a certain way based on the above sitting arrangement and so form a group. Which is the one that does not belong to the group?

- (A) Hawkins
- (B) Martin
- (C) Albert
- (D) Federal
- (E) Nicotine

Q64. In which of the following pairs do both the members drive a ship?

- (A) Edward, Nicotine
- (B) Hawkins, Nicotine
- (C) Edward, Federal
- (D) Alice, Hawkins
- (E) Martin, Alice

Q65. What is Edward's position with respect to Martin?

- (A) Immediate right
- (B) Third to the right
- (C) Second to the left
- (D) Fourth to the left
- (E) Second to the right

Directions (Q66-70): Study the following information carefully and give the answer of the questions given below.

In a row of eight boys Gaurav, Ravi, Rakesh, Ramesh, Deepak, Suresh, Tarun and Sandeep are standing in a row facing towards south direction, but not necessarily in same order. Ravi is fourth to the right to Ramesh. Rakesh is third to the left of Deepak who is not at any end of the row. Suresh is not to the right of Ramesh who is the sixth from west. Tarun is standing at middle of Ravi and Ramesh. Sandeep is not immediate neighbour of Tarun and Ramesh.

Q66. How many persons are standing between Gaurav and Suresh?

- (A) One
- (B) Two
- (C) Three
- (D) Four
- (E) None of these

Q67. Who is standing at the right end?

- (A) Gaurav

- (B) Sandeep
- (C) Rakesh
- (D) Suresh
- (E) None of these

Q68. Who is immediate left of Suresh?

- (A) Rakesh
- (B) Ramesh
- (C) Deepak
- (D) Gaurav
- (E) None of these

Q69. Who is standing at the left end?

- (A) Sandeep
- (B) Suresh
- (C) Rakesh
- (D) Ravi
- (E) None of these

Q70. How many persons are standing between Deepak and Rakesh?

- (A) One
- (B) Two
- (C) Three
- (D) Four
- (E) None of these

Directions (Q71-75): In each of the following questions, the signs (a), (b), =, (c) and (d) are being used which have the following meanings:

A (a) B means A is smaller than B.

A (b) B means A is smaller or equal to B.

A = B means A is equal to B.

A (c) B means A is greater than B.

A (d) B means A is greater or equal to B.

Assuming the statement given in each of the following questions deduce which of the two inferences I and II is/are true?

Q71. Statement-R (a) S, S (c) T, T (b) N

Inference-

I. S(d)N II. R(d)T

- (A) If only I is true
- (B) If only II is true
- (C) If I or II is true
- (D) If neither I nor II is true
- (E) If both are true.

Q72. Statement-P (d) Q, Q = R, R (b) Z

Inference-

I. P(d)R II. Q(b)Z

- (A) If only I is true

- (B) If only II is true
- (C) If I or II is true
- (D) If neither I nor II is true
- (E) If both are true.

Q73. Statement-L (c) M, M (a) N, N (d) K

Inference-

I. L(b)N II. L(c)N

- (A) If only I is true
- (B) If only II is true
- (C) If I or II is true
- (D) If neither I nor II is true
- (E) If both are true.

Q74. Statement-S (d) P, P (b) Z, Z (c) T

Inference-

I. S(d)T II. S(c)Z

- (A) If only I is true
- (B) If only II is true
- (C) If I or II is true
- (D) If neither I nor II is true
- (E) If both are true.

Q75. Statement- K (c) L, L (b) R, R = P

Inference-

I. P(d)L II. K(c)R

- (A) If only I is true
- (B) If only II is true
- (C) If I or II is true
- (D) If neither I nor II is true
- (E) If both are true.

Directions (76-77): Study the following information carefully and answer the questions given below:

'P x Q' means 'P is brother of Q'.

'P - Q' means 'P is sister of Q'.

'P + Q' means 'P is father of Q'.

'P # Q' means 'P is mother of Q'.

Q76. How is D related to T in the given expression "H + T # R - D"?

- (A) Nephew
- (B) Niece
- (C) Nephew or Niece
- (D) Daughter or son
- (E) None of these

Q77. Which of the following equations represents F is daughter of W?

- (A) $W \# R + F$
- (B) $W \times R \times F$
- (C) $W + R \times F - T$

- (D) $W + R - F + T$
- (E) None of these

Directions (Q78-80): Study the following information carefully and answer the questions given below:

Ashok started from a place and run towards North and after running 6 km he turned to his right and run 7 km and again turned right and ran 7 km and once again turned right and ran 8 km and before stopping he turned his right and ran 1 km.

Q78. How far is he from his starting point?

- (A) 2 km
- (B) 1 km
- (C) 4 km
- (D) 3 km
- (E) Other than given options

Q79. In which direction is he going at the time he finishes the race?

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

Q80. In which direction is he from his starting point?

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