

Mock Test Paper - Series II: April 2026

Date of Paper: 27th April 2026

Time of Paper: 2.00 P.M. to 4.00 P.M.

FOUNDATION COURSE

PAPER 3: QUANTITATIVE APTITUDE

Time: 2 Hours

Marks: 100

1. Salaries of Ravi and Suneet are in the ratio 2:3. If the salary of each is increased by ₹ 4000, the new ratio becomes 40:57. What is Suneet's present salary ?
 - (a) ₹ 17,000
 - (b) ₹ 20,000
 - (c) ₹ 25,500
 - (d) ₹ 34,000
2. The price of scooter and moped are in the ratio 7 : 9. The price of moped is ₹ 16000 more than that of scooter. Then the price of moped is:
 - (a) ₹ 72000
 - (b) ₹ 56000
 - (c) ₹ 80000
 - (d) ₹ 70000
3. $\frac{1}{2} \log_{10} 25 - 2 \log_{10} 3 + \log_{10} 18 =$
 - (a) 18
 - (b) 1
 - (c) $\log_{10} 3$
 - (d) none of these
4. $\frac{1}{\log_{xy} xyz} + \frac{1}{\log_{yz} xyz} + \frac{1}{\log_{zx} xyz} =$
 - (a) $\log xyz$

- (b) 1
(c) 0
(d) 2
5. Roots of the equation $x^3+9x^2-x-9=0$.
(a) 1, 2, 3
(b) 1, -1, -9
(c) 2, 3, -9
(d) 1, 3, 9
6. if $\alpha + \beta = -2$ and $\alpha \cdot \beta = -3$ then α and β are the roots of the equation, which is
(a) $x^2-2x-3=0$
(b) $x^2+2x-3=0$
(c) $x^2+2x+3=0$
(d) $x^2-2x+3=0$
7. $U^{5x} = V^{5y} = W^{5z}$ and $U^2 = vw$, then the value of $xy+xz-2yz$ will be :
(a) 5
(b) 2
(c) 1
(d) 0
8. Find the value of k in $3x^2 - 2kx + 5 = 0$, if $x = 2$.
(a) $17/4$
(b) $-7/14$
(c) $4/17$
(d) $-4/17$
9. The difference between the roots of the equation $x^2-7x-9=0$ is
(a) 7
(b) $\sqrt{85}$
(c) 9

(d) $2\sqrt{85}$

10. The solution of the Inequality $8x+6<12x+4$ is :

(a) $(-2, 2)$

(b) $(0,-2)$

(c) $(-\frac{1}{2}, \infty)$

(d) $(\frac{1}{2}, \infty)$

11. On solving the inequalities $2x + 5y \leq 20, 3x + 2y \leq 12, x \leq 0, y \leq 0$, we get the following situation

(a) $(0, 0), (0, 4), (4, 0)$ and $(20/11, 36/11)$

(b) $(0, 0), (10, 0), (0, 6)$ and $(20/11, 36/11)$

(c) $(0, 0), (0, 4), (4, 0)$ and $(2, 3)$

(d) $(0, 0), (10, 0), (0, 6)$ and $(2, 3)$

12. Find the effective rate of interest on ₹ 10,000 on which interest is payable half yearly at 5% p.a.

(a) 5.06%

(b) 4%

(c) 0.4%

(d) 3%

13. Find the effective rate of interest at 10% p.a. when interest is payable quarterly.

(a) 10.38%

(b) 5%

(c) 5.04%

(d) 4%

14. What will be the population after 3 years when present population is 1,25,000 and population increases at the rate of 3% in 1st year, at 4% in 2nd year and at 5% in 3rd year?

(a) 1,28,589

- (b) 1,40,595
 - (c) 1,27,000
 - (d) 1,30,000
15. The value of scooter is ₹ 100,000. Find its value after 7 years if rate of depreciation is 10% p.a.
- (a) ₹ 40000
 - (b) ₹ 47830
 - (c) ₹ 42,079
 - (d) ₹ 42,000
16. $SI = 0.125 P$ at 10% p.a. Find Time.
- (a) 1 year 3 months
 - (b) 25 years
 - (c) 0.25 years
 - (d) 1 year 6 months
17. How much amount is required to be invested every year as to accumulate ₹ 6,00,000 at the end of 10 years, if interest is compounded annually at 10% rate of interest [Given : $(1+10\%)^{10} = 2.59374$].
- (a) ₹ 37,000
 - (b) ₹ 37,200
 - (c) ₹ 37,647
 - (d) ₹ 38,000
18. The difference between the CI and SI for 2 year is 21. If the rate of interest is 5%, the final principal is:
- (a) ₹ 8,200
 - (b) ₹ 4,800
 - (c) ₹ 8,000
 - (d) ₹ 8,400

19. Present value of a scooter is ₹ 72,000. If its value decreases every year by 10%, then its value before 3 years is equal to:
- (a) 98,765
 - (b) 90,000
 - (c) 85,000
 - (d) 80, 000
20. Mr. X lent some amount of money at 4% S.I. and he obtained ₹ 520 less than he lent in 5 years. The sum lent is
- (a) ₹ 620
 - (b) ₹ 650
 - (c) ₹ 750
 - (d) ₹ 2,600
21. ₹ 8,829 is invested into three different sectors in such a way that their amounts at 4% p.a. S.I. after 5 years; 6 and 8 years are equal. Find each part of the sum.
- (a) ₹ 3,069, ₹ 2,970; ₹ 2,790
 - (b) ₹ 3,089, ₹ 2,970; ₹ 2,790
 - (c) ₹ 3,609, ₹ 2,970; ₹ 2,790
 - (d) ₹ 3,069, ₹ 2,960; ₹ 2,760
22. A ₹ 1000 bond paying annual dividends at 8.5% will be redeemed at par at the end of 10 years. Find the purchase price of this bond if the investor wishes a yield rate of 8%
- (a) ₹ 907.135
 - (b) ₹ 1033.55
 - (c) ₹ 945.67
 - (d) None of these
23. Mr. X invest ₹ 10,000 every year starting from today for next: 10 years suppose interest rate is 8% per annual compounded annually. Calculate future value of the annuity.
- (a) ₹ 1,56,454.88
 - (b) ₹ 1,56,000.00
 - (c) ₹ 1,44,865.625

- (d) None of these
24. Three girls and five boys are to be seated in a row so that no two girls sit together. Total No. of arrangements are:
- (a) 14,400
(b) 120
(c) $5P3$
(d) $3! \times 5!$
25. A garden having 6 tall trees in a row. In how many ways 5 children stand, one in a gap between the trees in order to pose for a photograph?
- (a) 24
(b) 120
(c) 720
(d) 30
26. In how many ways can 4 people be selected at random from 6 boys and 4 girls if there are exactly two girls?
- (a) 90
(b) 360
(c) 92
(d) 480
27. Find the number of arrangements in which the letters of the word 'MONDAY' be arranged so that the words thus formed begin with 'M' and do not end with 'N'.
- (a) 720
(b) 120
(c) 96
(d) None
28. A sum of Money doubles itself at compound interest in 10years. In how many years will it become eight times
- (a) 10
(b) 30

- (c) 40
(d) 35
29. If the sum of n terms of an A.P be $2n^2 + 5n$, then its ' n th' term is:
(a) $4n - 2$
(b) $3n - 4$
(c) $4n + 3$
(d) $3n + 4$
30. Sum of x terms of two AP's are in the ratio $(3x + 5) : (5x + 3)$ then ratio of their 10th term is
(a) 31 : 49
(b) 30 : 49
(c) 28 : 49
(d) None of these
31. The sum of the first eight terms of a G.P. is five times the sum of the first four terms; then the common ratio is –
(a) $\sqrt{2}$
(b) $-\sqrt{2}$
(c) $\pm\sqrt{2}$
(d) None of these
32. If the p th term of an A.P. is ' q ' and the q th term is ' p ', then its r th term is:
(a) $p + q + r$
(b) $p + q - r$
(c) $p - q - r$
(d) $p + q$
33. If $A = (1, 2, 3, 4, 5)$, $B = (2, 4)$ and $C = (1, 3, 5)$ then $(A - C) \times B$ is:
(a) $\{(2, 2)(2, 4)(4, 2)(4, 4)(5, 2) (5, 4)\}$
(b) $\{(1, 2) (1, 4) (3, 2) (3, 4) (5, 2) (5, 4)\}$
(c) $\{(2, 2) (4, 2) (4, 4) (4, 5)\}$

- (d) $\{(2, 2) (2, 4) (4, 2) (4, 4)\}$
34. Let $A = \{1, 2, 3\}$, then the relation $R = \{(1, 1), (2, 3), (2, 2), (3, 3), (1, 2)\}$ is:
- Symmetric
 - Transitive
 - Reflexive
 - Equivalence
35. Let R is the set of real numbers, such that the function $f: R \rightarrow R$ and $g: R \rightarrow R$ are defined by $f(x) = x^2 + 3x + 1$ and $g(x) = 2x - 3$. Find $(f \circ g)$:
- $4x^2 + 6x + 1$
 - $x^2 + 6x + 1$
 - $4x^2 - 6x + 1$
 - $x^2 - 6x + 1$.
36. Find the positive value of k for which the equations: $x^2 + kx + 64 = 0$ and $x^2 - 8x + k = 0$ will have real roots:
- 12
 - 16
 - 18
 - 22
37. If $x = ct$, $y = c/t$, then dy/dx is equal to :
- $1/t$
 - $t \cdot e^t$
 - $-1/t^2$
 - None of these
38. Find the gradient of curve $y = 3x^2 - 5x + 4$ at the point $(1, 2)$
- 1
 - 3
 - 4
 - 5

39. If $f'(x) = 3x^2 + 2$ & $f(0) = 0$ then find $f(2)$.
- 8
 - 10
 - 12
 - none of these
40. $\int 2^{3x} \cdot 3^{2x} \cdot 5^x \cdot dx = \underline{\hspace{2cm}}$
- $\frac{2^{3x} \cdot 3^{2x} \cdot 5^x}{\log(720)} + c$
 - $\frac{2^{3x} \cdot 3^{2x} \cdot 5^x}{\log(360)} + c$
 - $\frac{2^{3x} \cdot 3^{2x} \cdot 5^x}{\log(180)} + c$
 - $\frac{2^{3x} \cdot 3^{2x} \cdot 5^x}{\log(90)} + c$
41. If HEALTH is written as GSKZDG, then how will NORTH be written in that code ?
- OPSUI
 - GSQNM
 - FRPML
 - IUSPO
42. In a certain code, TEACHER is written as VGCEJGT. How is CHILDREN written in that code ?
- EJKNEGTP
 - EGKNEITP
 - EJKNFGTO
 - EJKNFTGP
43. Find odd man out of the following:
- 15
 - 25
 - 37
 - 49

44. In the following series, which number will replace the question mark:
23, 29, 31, 37, 41, 43, ?
(a) 45
(b) 53
(c) 47
(d) 49
45. In a certain code language, '253' means 'books are old'; '546' means 'man is old' and '378' means 'buy good books'. What stands for 'are' in that code?
(a) 2
(b) 4
(c) 5
(d) 6
46. Sangeeta leaves from her home. She first walk 30 metres in North-West direction, and then 30m in South West direction, next she walks 30 metres in South-East direction. Finally she turns towards her house. In which direction is she moving?
(a) North-West
(b) North-East
(c) South-East
(d) South-West
47. Shweta moved a distance of 75 metres towards the north. She then turned to the left and walking for about 25 metres, turned left again and walked 80 metres. Finally, she turned to the right at an angle of 45° . In which direction was she moving finally?
(a) South
(b) South-West
(c) North-East
(d) North-West
48. Varun faces towards north. Turning to his right, he walks 25 metres. He then turns to his left and walks 30 metres. Next, he moves 25 metres to his right. He then turns to his right again and walks 55 metres. Finally he turns to the right and moves 40 metres. In which direction is he now from his starting point ?

- (a) South-East
 - (b) South-West
 - (c) South
 - (d) North-West
49. Pankaj is facing west. He turns 45° in the clockwise direction and then again another turns with 180° in the same direction i.e. clockwise direction, after that he turns 270° in the anticlockwise direction. Which direction is he facing now ?
- (a) North-West
 - (b) West
 - (c) South-West
 - (d) South
50. A man is facing north. He turns 45 degree in the clockwise direction and then another 180 degree in the same direction and then 45 degree in the anticlockwise direction. Find which direction he is facing now?
- (a) North
 - (b) East
 - (c) West
 - (d) South
51. In a straight line there are six persons sitting in a row. B is between F and D. E is between A and C. A does not stand next to F or D, C does not stand next to D. F is between which of the following persons?
- (a) B and E
 - (b) B and C
 - (c) B and D
 - (d) B and A
52. Eight leaders P, Q, R, S, T, U, V and W are sitting on a bench facing towards North.
- (i) T is fourth to the left of P
 - (ii) S is fourth to the right of W
 - (iii) U and R are not sitting at the ends, but they are neighbours of T and Q respectively.

(iv) P is next to the right of W and but left of Q.

Who are sitting at the extreme ends ?

- (a) T and S
- (b) P and Q
- (c) U and R
- (d) None

53. There are four children P, Q, R, S sitting in a row. P occupies seat next to Q but not next to R. If R is not sitting next to S? Who is occupying seat next to adjacent to S.

- (a) Q
- (b) P
- (c) P and Q
- (d) None of these

54. Five boys A, B, C, D and E are sitting in a row. A is to the right of B, and E is to the left of B but to the right of C. A is to the left of D. Who is second from the left end ?

- (a) D
- (b) A
- (c) E
- (d) B

55. Five persons are standing in a line. One of the two persons at the extreme ends is a professor and the other a businessman. An advocate is standing to the right of a student. An author is to the left of the businessman. The student is standing between the professor and the advocate. Counting from the left, the advocate is at which place ?

- (a) 1st
- (b) 2nd
- (c) 3rd
- (d) 5th

56. Pointing to a photograph, a man said "His mother husband ' s sister is my aunt". Then what is relation between a man and he ?

- (a) Son

- (b) Uncle
 - (c) Nephew
 - (d) Brother
57. If $P + Q$ means P is the mother of Q. $P \times Q$ means P is the father of Q. $P - Q$ means P is the sister of Q. Then which of the following relationship shows B is Aunt of A?
- (a) $B - D \times A$
 - (b) $B - D \times C + A$
 - (c) $A - D \times B$
 - (d) $B - D - A$
58. Ram and Mohan are brothers, Shankar is Mohan's father. Chhaya is Shankar's sister. Priya is Shankar's niece. Shubhra is Chhaya's grand daughter. Then Ram is Shubhra's
- (a) Brother
 - (b) Uncle
 - (c) Cousin
 - (d) Nephew
59. Pointing to a man in a photograph, a woman said, "the father of his brother is the only son of my grandfather", how is the woman related to the man in the photograph?
- (a) Mother
 - (b) Aunty
 - (c) Daughter
 - (d) Sister
60. Suresh introduce a man as "he is the son of the woman who is the mother of the husband of my mother". How is Suresh is related to the man?
- (a) Brother-in-law
 - (b) Son
 - (c) Brother
 - (d) Nephew

61. The number of times a particular items occurs in a class interval is called its:

- (a) Mean
- (b) Cumulative Frequency
- (c) Frequency
- (d) None of the above

62. An Ogive is a graphical representation of:

- (a) Cumulative Frequency distribution
- (b) Ungrouped Data
- (c) A frequency distribution
- (d) None of the above

63. From the following data, cumulative frequency for the class 20 – 30 is

Class	Frequency
0 – 10	4
10 – 20	6
20 – 30	20
30 – 40	8
40 – 50	3

- (a) 26
- (b) 10
- (c) 41
- (d) 30

64. In tabulation, source of data, if any is shown in the :

- (a) Stub
- (b) Body
- (c) Caption
- (d) Footnote

65. From the following data find the number of class intervals if class length is given as 5.
73, 72, 65, 41, 54, 80, 50, 46, 49, 53

- (a) 6

- (b) 5
 - (c) 7
 - (d) 8
66. Find Q_1 for the following observations: 7,9,5,4,10,15,14,18,6,20
- (a) 4.75
 - (b) 5.25
 - (c) 5.75
 - (d) 6.25
67. Histogram is useful to determine graphically the value of:
- (a) Arithmetic Mean
 - (b) Mode
 - (c) Median
 - (d) None of these
68. Data are said to be _____ if the investigator himself is responsible for the collection of data.
- (a) Primary Data
 - (b) Secondary Data
 - (c) Mixed of Primary and Secondary Data
 - (d) None of these
69. A suitable graph for representing the portioning of total into sub parts in statistics is:
- (a) A Pictograph
 - (b) A Pie Chart
 - (c) An Ogive
 - (d) A Histogram
70. The AM of 15 observations is 9 and the AM of first 9 observations is 11 and then AM of remaining observations is:
- (a) 11
 - (b) 6

- (c) 5
- (d) 9
71. In a moderately skewed distribution the values of mean and median are 12 and 8 respectively. The value of mode is:
- (a) 0
- (b) 12
- (c) 15
- (d) 30
72. Which of the following is positional average?
- (a) Median
- (b) GM
- (c) HM
- (d) AM
73. For a symmetric distribution:
- (a) Mean = Median = Mode
- (b) Mode = 3 Median – 2 Mean
- (c) Mode = $\frac{1}{3}$ Median = $\frac{1}{2}$ Mean
- (d) None
74. For the distribution

x	f
1	6
2	9
3	10
4	14
5	12
6	8

The value of median is:

- (a) 3.5
- (b) 3

- (c) 4
 - (d) 5
75. The QD of six numbers 15, 8, 36, 40, 38, 41 is equal to:
- (a) 12.5
 - (b) 25
 - (c) 13.5
 - (d) 37
76. SD of first five consecutive natural numbers is:
- (a) $\sqrt{10}$
 - (b) $\sqrt{8}$
 - (c) $\sqrt{3}$
 - (d) $\sqrt{2}$
77. If the profit of a company remain same for the last 10 months then the SD of profit of the company would be:
- (a) Positive
 - (b) Negative
 - (c) Zero
 - (d) either (a) or (c)
78. Coefficient of Quartile Deviation is $\frac{1}{4}$ then $Q_3/Q_1 = ?$
- (a) $\frac{5}{3}$
 - (b) $\frac{4}{3}$
 - (c) $\frac{3}{4}$
 - (d) $\frac{3}{5}$
79. The sum of mean and SD of a series is $a + b$, if we add 2 to each observation of the series then the sum of mean and SD is :
- (a) $a + b + 2$
 - (b) $6 - a + b$
 - (c) $4 + a - b$

- (d) $a + b + 4$
80. The overall percentage of failure in a certain examination is 0.30. What is the probability that out of a group of 6 candidates at least 4 passed the examination?
- (a) 0.74
(b) 0.71
(c) 0.59
(d) 0.67
81. In a certain manufacturing process, 5% of the tools produced turn out to be defective. Find the probability that in a sample of 40 tools, at most 2 will be defective: [Given: $e^{-2} = 0.135$]
- (a) 0.555
(b) 0.932
(c) 0.785
(d) 0.675
82. What is the mean of X having the following density function? $f(x) = \frac{1}{\sqrt[4]{2\pi}} e^{-\frac{(x-10)^2}{32}}$ for $-\infty < x < \infty$
- (a) 4
(b) 10
(c) 40
(d) None of these
83. If mean and variance are 5 and 3 respectively then relation between p and q is :
- (a) $p > q$
(b) $p < q$
(c) $p = q$
(d) p is symmetric
84. In a Poisson distribution if $P(x=4) = P(x=5)$ then the parameter of Poisson distribution is:
- (a) $\frac{4}{5}$

- (b) $\frac{5}{4}$
- (c) 4
- (d) 5
85. Two events A and B are such that they do not occur simultaneously then they are called _____ events.
- (a) Mutually exhaustive
- (b) Mutually Exclusive
- (c) Mutually Independent
- (d) Equally Likely
86. If a coin is tossed 5 times then the probability of getting Tail and Head occurs alternatively is:
- (a) $\frac{1}{8}$
- (b) $\frac{1}{16}$
- (c) $\frac{1}{32}$
- (d) $\frac{1}{64}$
87. When 2 dice are thrown simultaneously then the probability of getting at least one 5 is:
- (a) $\frac{11}{36}$
- (b) $\frac{5}{36}$
- (c) $\frac{8}{15}$
- (d) $\frac{1}{7}$
88. The probability that a leap year has 53 Wednesday is:
- (a) $\frac{2}{7}$

(b) $\frac{3}{5}$

(c) $\frac{1}{7}$

(d) $\frac{2}{3}$

89. Ram is known to hit a target in 2 out of 3 shots whereas Shyam is known to hit the same target in 5 out of 11 shots. What is the probability that the target would be hit if they both try?

(a) $\frac{9}{11}$

(b) $\frac{6}{11}$

(c) $\frac{10}{33}$

(d) $\frac{3}{11}$

90. In a box carrying one dozen of oranges, one third has become bad. If 3 oranges are taken out from the box at random, what is the probability that at least one orange out of the three oranges picked up is good?

(a) $\frac{54}{55}$

(b) $\frac{1}{55}$

(c) $\frac{45}{50}$

(d) None of these

91. For a $(m \times n)$ classification of bivariate data, the maximum number of conditional distributions is

(a) p

(b) $p+q$

(c) pq

(d) p

92. If two variables x and y are related by $2X + 3Y - 7 = 0$ and the mean and mean deviation about mean of X are 1 and 0.3 respectively, then the co-efficient of mean deviation of Y about mean is .
- (a) -5
(b) 4
(c) 12
(d) 50
93. Correlation Co-efficient is _____ of the units of measurements
- (a) Independent
(b) Dependent
(c) Both
(d) none of these
94. The coefficient of rank correlation of marks obtained by 10 students in English and Economics was found to be 0.5, it was later discovered that the difference in ranks in the two subjects obtained by one student was wrongly taken as 3 instead of 7. Find correct coefficient of rank correlation.
- (a) 0.514
(b) 0.364
(c) 0.15
(d) 0.260
95. The prices and quantities of 3 commodities in base and current years are as follows:

P_0	P_1	Q_0	Q_1
12	14	10	20
10	8	20	30
8	10	30	10

The Laspyre's Price Index Number is:

- (a) 118.13
(b) 107.14
(c) 120.10
(d) None of these

96. The cost of living index number in year 2015 and 2018 were 97.5 and 115 respectively. The salary of a worker in 2015 was 19500. How much additional salary was required for him in 2018 to maintain the same standard of living as in 2015?
- (a) 3000
 - (b) 4000
 - (c) 3500
 - (d) 4500
97. Fisher's method for construction of Index Numbers uses_____
- (a) Geometric Mean
 - (b) Harmonic Mean.
 - (c) Median
 - (d) HM
98. Consumer price index is commonly known as
- (a) Chain Based index
 - (b) Ideal index
 - (c) Wholesale price index
 - (d) Cost of living index.
99. Circular Test is satisfied by :
- (a) Paasche's Index Number
 - (b) The simple geometric mean of price relatives and the weighted aggregative with fixed weights
 - (c) Laspeyre's Index Number
 - (d) None of these
100. The consumer price index in 1990 increases by 80- per cent as compared to the base 1980. A person in 1980 getting ₹ 60,000 per annum should now get
- (a) ₹ 1,08,000 per annum
 - (b) ₹ 82,000 per annum
 - (c) ₹ 64,000 per annum
 - (d) None of these