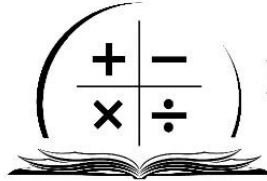


STATE LEVEL EXAM (2024 – 2025)

 MATHS MARATHON Competition For Excellence	CLASS 6	
Total Questions : 100	Total Marks : 100	Time : 1 hour

INSTRUCTIONS TO THE STUDENT'S

1. Please do not open this question paper unless you are instructed to do so.
2. Additional 5 minutes will be given to the candidates for filling up the student's details before the start of the competition.
3. The paper consists of 5 different chapters of the textbook.
4. All questions are compulsory and consist of equal marks.
5. Each question is carrying 1 mark, there is no negative marking.
6. There is only one correct answer, hence mark one answer only.
7. Darken the circle with dark pencil or blue/black ball pen only.
8. Return the answer sheet along with the question paper to the supervisor at the end of the exam.
9. Extra Blank pages can be used for rough calculations

Name - _____

SCHOOL - _____

ROLL NO - _____ CLASS - _____

26. The time taken by two workers to complete a task is in the ratio 3:4. If the first worker finishes in 12 days, how many days does the second worker take?

- A) 14 days B) 16 days C) 18 days

27. A mixture contains milk and water in the ratio 4:1. If the total quantity of the mixture is 25 liters, how much milk does it contain?

- A) 20 liters B) 15 liters C) 10 liters

28. A rope is cut into two pieces of lengths 45 m and 60 m. What is the ratio of the shorter piece to the longer piece?

- A) 4:5 B) 5:6 C) 3:4

29. The lengths of two ropes are in the ratio 4:5. If the longer rope is 45 meters, what is the length of the shorter rope?

- A) 30 meters B) 36 meters C) 40 meters

30. The heights of two buildings are 60 meters and 90 meters. What is the ratio of the height of the shorter building to the taller one?

- A) 2:3 B) 3:5 C) 4:5

31. A machine can produce 250 items in 5 hours. How many items can it produce in 8 hours?

- A) 400 B) 450 C) 500

32. A machine can print 500 pages in 2 hours. How many pages will it print in 6 hours?

- A) 1700 pages B) 1600 pages C) 1500 pages

33. A gardener plants 60 trees in 5 days. How many trees will he plant in 8 days?

- A) 96 B) 94 C) 98

34. A recipe calls for sugar and flour in the ratio 3:5. If 15 cups of flour are used, how much sugar is needed?

- A) 6 cups B) 9 cups C) 10 cups

35. A vehicle uses 18 liters of fuel to cover 240 km. How much fuel will it use to cover 600 km?

- A) 36 liters B) 45 liters C) 50 liters

36. A mixture contains sugar and flour in the ratio 2:3. If there are 36 kg of flour, how much sugar is in the mixture?

- A) 20 kg B) 30 kg C) 24 kg

37. The present age of a woman is 4 years less than twice the age of her daughter. The sum of their ages is 56 years. What is the present age of the woman?

- A) 30 years B) 32 years C) 36 years

38. The present age of a father is four times that of his son. After 10 years, the father's age will be twice the son's age. What is the present age of the son?

- A) 10 years B) 5 years C) 7 years

39. A father is 4 times as old as his son. In 8 years, the father's age will be twice the son's age. What is the present age of the son?

- A) 6 years B) 4 years C) 7 years

40. The present age of a father is 10 years more than three times the age of his son. After 12 years, the father's age will be twice the son's age. What is the present age of the son?

- A) 2 years B) 1 years C) 4 years

SECTION 3 - PERCENTAGE & PROFIT - LOSS

41. What is 15% as a fraction?

- A) $\frac{3}{10}$ B) $\frac{1}{5}$ C) $\frac{3}{20}$

42. What is 55% as a fraction?

- A) $\frac{11}{20}$ B) $\frac{5}{9}$ C) $\frac{1}{2}$

43. What is $\frac{9}{20}$ as a percentage?

- A) 50% B) 45% C) 40%

44. What is $\frac{5}{8}$ as a percentage?

- A) 55% B) 65% C) 62.5%

45. A shopkeeper increases the price of a product by 15%. If the original price was ₹500, what is the new price?

- A) ₹600 B) ₹575 C) ₹550

46. A man invests ₹10,000 in a bank that offers 6% annual interest. What will be his interest after one year?

- A) ₹700 B) ₹500 C) ₹600

47. A student is allowed 20% more time to complete a test. If the original time was 2 hours, how much extra time is given?

- A) 20 minutes B) 30 minutes C) 24 minutes

48. A shirt is priced at ₹1,000. If it is sold at a 20% discount, what is the selling price?

- A) ₹800 B) ₹850 C) ₹900

49. A shopkeeper gives a 25% discount on a product. If the product is sold for ₹1,500, what was its original price?

- A) ₹1,600 B) ₹1,700 C) ₹2,000

50. The population of a town increases by 10% every year. If the current population is 50,000, what will it be next year?

- A) 52,000 B) 55,000 C) 60,000

51. A person buys a mobile phone for ₹15,000 and sells it for ₹12,000. What is the loss percentage?

- A) 20% B) 15% C) 10%

52. A cloth merchant bought 100 meters of cloth for ₹4,000. He sells it at a profit of 25%. What is the selling price of 1 meter of cloth?

- A) ₹50 B) ₹55 C) ₹60

53. A trader buys 10 pens for ₹150 and sells them for ₹180. What is the profit percentage?

- A) 15% B) 20% C) 25%

54. A person buys 10 items at ₹800 each and sells 5 items at a profit of 15% and the remaining 5 items at a loss of 10%. What is his overall profit or loss percentage?

- A) Profit of 2.5% B) Loss of 2.5% C) No profit, no loss

55. A merchant sells a book for ₹800, making a profit of 25%. What is the cost price of the book?

- A) ₹600 B) ₹650 C) ₹640

56. A shopkeeper bought an article for ₹1,500 and sold it for ₹1,200. What is the loss percentage?

- A) 15% B) 20% C) 25%

57. A man bought a camera for ₹6,000 and sold it for ₹7,200. What is the profit percentage?

- A) 15% B) 18% C) 20%

58. A shopkeeper buys 5 shirts for ₹600 each and sells them at ₹700 each. What is his overall profit percentage?

- A) 8.14% B) 16.67% C) 12.44%

59. A trader buys 40 units of a product at ₹200 each and sells them for ₹220 each. What is the profit percentage?

- A) 15% B) 10% C) 8%

60. A person bought a laptop for ₹40,000 and sold it at a profit of 10%. What is the selling price?

- A) ₹46,000 B) ₹45,000 C) ₹44,000

SECTION 4 - TRIANGLES & QUADRILATERALS

61. A triangle with all angles less than 90° is called a:
A) Right triangle B) Obtuse triangle C) Acute triangle
62. The point of intersection of the angle bisectors of a triangle is called the:
A) Centroid B) Incenter C) Orthocenter
63. If an equilateral triangle has one side of 8 cm, what is the length of the other two sides?
A) 8 cm B) 6 cm C) Cannot be determined
64. In an isosceles triangle, the angles opposite the equal sides are:
A) Equal B) Different C) Right angles
65. In a scalene triangle, the largest angle is always opposite to the:
A) Shortest side B) Largest side C) Equal side
66. In a right-angled triangle, the sum of the other two angles (besides the right angle) is:
A) 90° B) 60° C) 180°
67. In an obtuse-angled triangle, the largest angle is always:
A) Equal to 90° B) Greater than 90° C) Less than 90°
68. Which of the following can be an angle of an acute-angled triangle?
A) 95° B) 120° C) 60°
69. What triangle is formed with sides 6 cm, 8 cm, and 10 cm
A) Right-angled triangle B) Acute-angled triangle C) Obtuse-angled triangle
70. What triangle is formed with sides 8 cm, 8 cm, and 8 cm:
A) Scalene triangle B) Equilateral triangle C) Right-angled triangle
71. What triangle is formed with sides 15 cm, 15 cm, and 20 cm:
A) Scalene triangle B) Equilateral triangle C) Isosceles triangle
72. Can a triangle be formed with sides 8 cm, 15 cm, and 20 cm?
A) Yes B) No C) Only if it is an obtuse-angled triangle
73. Can a triangle be formed with sides 7 cm, 10 cm, and 12 cm?
A) Yes B) No C) Only if it is an isosceles triangle
74. Which quadrilateral has all sides of equal length and all angles equal to 90° ?
A) Rectangle B) Square C) Rhombus

88. What is the principal if the Simple Interest is ₹1350, rate is 9% p.a. , and time is 5 years?

- A) ₹2500 B) ₹3000 C) ₹4000

89. A man borrowed some money at 6% per annum Simple Interest for 4 years. If he paid ₹1200 as interest, what was the borrowed amount?

- A) ₹5000 B) ₹4500 C) ₹6000

90. A sum of ₹9000 is invested at 10% per annum. What will be the interest earned after 3.5 years?

- A) ₹2700 B) ₹3000 C) ₹3150

91. If ₹5000 becomes ₹6500 in 5 years, find the rate of interest per annum.

- A) 5% B) 6% C) 7%

92. How long will it take for ₹8000 to yield ₹3200 as Simple Interest at 8% per annum?

- A) 3 years B) 4 years C) 5 years

93. Ramesh borrowed ₹8000 at a rate of 5% p.a. for 3 years. What is interest to pay?

- A) ₹1000 B) ₹1200 C) ₹1500

94. A sum of ₹5000 is invested at a rate of 9% per annum for 4 years. What will be the total amount at the end of the investment period?

- A) ₹6800 B) ₹6200 C) ₹7200

95. If Sita invests ₹20,000 for 4 years at 8% per annum simple interest, what will be the total interest earned ?

- A) ₹6400 B) ₹6450 C) ₹7200

96. What amount will Harry receive after 4 years if she invests ₹20,000 at 8% simple interest per annum?

- A) 26,200 B) 26,400 C) 24,200

97. If ₹50,000 is invested at 8% Simple Interest per annum, what will be the total interest earned in 5 years?

- A) ₹25,000 B) ₹22,500 C) ₹20,000

98. A person invests ₹6000 at 10% per annum Simple Interest. How long will it take for the investment to double?

- A) 10 years B) 6 years C) 7 years

99. Find the principal if the Simple Interest is ₹600, time is 3 years, and rate is 4% per annum.

- A) ₹4500 B) ₹5000 C) ₹4000

100. How long will it take for ₹5000 to earn ₹1000 as Simple Interest at 10% per annum?

- A) 1 year B) 3 years C) 2 years

ANSWER KEY

QUE	ANS	QUE	ANS	QUE	ANS	QUE	ANS	QUE	ANS
1	A	21	B	41	C	61	C	81	B
2	A	22	C	42	A	62	B	82	A
3	C	23	C	43	B	63	A	83	C
4	B	24	B	44	C	64	A	84	C
5	C	25	A	45	B	65	B	85	A
6	A	26	B	46	C	66	A	86	B
7	C	27	A	47	C	67	B	87	C
8	B	28	C	48	A	68	C	88	B
9	C	29	B	49	C	69	A	89	A
10	C	30	A	50	B	70	B	90	C
11	A	31	A	51	A	71	C	91	B
12	B	32	C	52	A	72	A	92	C
13	A	33	A	53	B	73	A	93	B
14	A	34	B	54	A	74	B	94	A
15	B	35	B	55	C	75	C	95	A
16	A	36	C	56	B	76	C	96	B
17	C	37	C	57	C	77	A	97	C
18	B	38	B	58	B	78	B	98	A
19	B	39	B	59	B	79	C	99	B
20	C	40	A	60	C	80	A	100	C