STATE LEVEL EXAM (2025 – 2026)

MATHS MARATHON Competition For Excellence	CLASS **6**

Total Questions : 100 **Total Marks : 100** **Time : 80 Minutes**

INSTRUCTIONS TO THE STUDENT'S

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

Name - _____

SCHOOL - _____

ROLL NO - _____ CLASS - _____

SECTION 1 - EQUATIONS (ONE VARIABLE)

1. 9x - 4 = 23
   A) 2 B) 4 C) 3

2. 3z + 4 = 2z - 8
   A) -12 B) -4 C) 12

3. 2(x + 3) - 3(x - 1) = x + 7
   A) 1 B) 2 C) 3

4. 2(x + 5) + 3(2 x - 1) = 4(x + 3) + 3
   A) 1 B) 2 C) 3

5. Solve: $3(2x-5)-1=2(2x-6)$
   A) 3 B) 4 C) 2

6. Solve: $\frac{2x-3}{5}+\frac{x+1}{2}=\frac{4}{5}$
   A) 3 B) 1 C) 7

7. Solve: $\frac{3(x-2)}{4}=\frac{2(x+1)}{3}$
   A) 23 B) 26 C) 10

8. Solve: $6-\frac{2x-1}{3}=\frac{x+8}{2}$
   A) 2 B) 3 C) 4

9. A train travels 60 miles per hour. If it travels for t hours and covers 300 miles, how long did it travel?
   A) 3 hours B) 5 hours C) 6 hours

10. The sum of a number and 14 is twice the number. What is the number?
    A) 7 B) 14 C) 28

11. A number is subtracted from 10, and the result is 3. What is the number?
    A) 7 B) 8 C) 9

12. An object travels at a speed of 40 km per hour. How long will it take to travel 120 kilometers?
    A) 2 hours B) 4 hours C) 3 hours

13. A person buys a pair of shoes for ₹45 and a hat for ₹15. How much did they spend in total?
    A) ₹60 B) ₹50 C) ₹70

14. Lisa buys 3 books for ₹5 each. If she buys 2 pens for ₹2 each, how much did Lisa spend in total?
    A) ₹15 B) ₹17 C) ₹19

15. A number when multiplied by 4 and increased by 9 gives 41. Find the number.
    A) 7 B) 8 C) 9

16. Three times a number plus 8 equals 5 times the number minus 4. Find the number.
    A) 6 B) 4 C) 8

17. Five more than twice a number is 27. Find the number.
A) 9 B) 13 C) 11

18. The present age of Ravi is twice the age he was 6 years ago. Find his present age.
A) 10 years B) 12 years C) 14 years

19. A number is such that when 5 is subtracted from one-third of it, the result is 7. Find the number.
A) 36 B) 42 C) 48

20. A number when divided by 5 and increased by 6 becomes 14. Find the number.
A) 20 B) 30 C) 40

SECTION 2 - RATIO-PROPORTION

21. Find the proportion of 120 liters to 150 liters.
A) 4:5 B) 3:4 C) 5:6

22. Find the proportion of 27 to 45.
A) 3:4 B) 4:5 C) 3:5

23. A car travels 120 km using 8 liters of fuel. What's the ratio of distance to the fuel used?
A) 15:1 B) 20:1 C) 25:1

24. A company has 60 male employees and 80 female employees. What is the ratio of male to female employees?
A) 5:6 B) 4:5 C) 3:4

25. A recipe uses 9 cups of flour and 6 cups of sugar. What is the ratio of flour to sugar?
A) 2:3 B) 1:2 C) 3:2

26. A fruit vendor sells 40 apples and 60 oranges in a day. What is the ratio of apples to oranges?
A) 2:3 B) 3:4 C) 4:5

27. A car travels 150 km in 5 hours. How far will it travel in 8 hours at the same speed?
A) 210 km B) 220 km C) 240 km

28. A printer prints 250 pages in 5 minutes. How many pages will it print in 12 minutes?
A) 500 B) 700 C) 600

29. 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

30. A bakery bakes 240 pieces of bread in 6 hours. How many pieces will it bake in 9 hours?
A) 360 pieces B) 350 pieces C) 375 pieces

31. The ratio of boys to girls in a class is 5 : 3. If there are 24 girls, how many boys are there?
A) 40 B) 35 C) 45

32. The ratio of pens to pencils is 5 : 7. If there are 84 pencils, how many pens are there?
A) 50 B) 60 C) 65

33. The ratio of two numbers is 6 : 11. If their difference is 25, find the smaller number.
A) 30 B) 36 C) 66

34. If 8 men can do a work in 15 days, how many days will 12 men take to do the same work?
A) 8 B) 10 C) 12

35. The ages of A & B are in ratio 4 : 5. After 6 yrs, their ages will in ratio 5 : 6. Find A's present age.
A) 24 years B) 30 years C) 36 years

36. Two numbers are in the ratio 9 : 13. If 12 is added to the smaller number, the ratio becomes 3 : 4. Find the smaller number.
A) 136 B) 148 C) 144

37. The salaries of A, B, and C are in the ratio 2 : 3 : 5. If C gets ₹18,000 more than A, find B's salary.
A) ₹27,000 B) ₹18,000 C) ₹36,000

38. Sum of cash is divided among A, B, & C in ratio 5:7:8. If C gets ₹600 more than A, find total sum.
A) ₹3,000 B) ₹3,600 C) ₹4,000

39. Divide ₹900 among A, B, and C such that A : B = 4 : 5 and B : C = 10 : 9. How much does C get?
A) ₹270 B) ₹300 C) ₹330

40. The ratio of ages of father-son is 7 : 2. After 10 yrs, ratio becomes 9 : 4. Find father's present age.
A) 35 years B) 45 years C) 55 years

SECTION 3 - PERCENTAGE & PROFIT - LOSS

41. What is 20% as a fraction?
A) 1/5 B) 1/4 C) 1/2

42. What is 3/8 as a percentage?
A) 35% B) 37.5% C) 40%

43. What is 3/6 as a percentage?
A) 50% B) 40% C) 45%

44. In a class of 40 students, 25% are absent. How many students are present?
A) 28 B) 30 C) 32

45. If 25% of a number is 60, what is the number?
A) 200 B) 220 C) 240

46. A student scored 360 marks out of 450. What is his percentage?
A) 75% B) 80% C) 85%

47. A person invests ₹10,000 at annual interest rate of 8%. How much interest will he earn in 1 year?
A) ₹900 B) ₹800 C) ₹600

48. A person bought an article for ₹5,000 and sold it for ₹6,000. What is the profit percentage?
A) 20% B) 25% C) 30%

49. A man bought a pair of shoes for ₹1,000 and sold it for ₹1,200. What is the profit percentage?
A) 10% B) 15% C) 20%

50. A person buys a watch for ₹3,000 and sells it for ₹3,600. What is the profit percentage?
A) 15% B) 20% C) 40%

51. A restaurant gives a 15% discount on a bill of ₹1,800. How much discount will the customer get?
A) ₹240 B) ₹250 C) ₹270

52. A person has ₹4,500. He spends 20% on food & 30% on rent. How much he spends on food?
A) ₹800 B) ₹900 C) ₹1,000

53. A trader bought a bicycle for ₹7,500 and sold it for ₹8,400. What is the profit percentage?
A) 10% B) 15% C) 12%

54. If the price of an article increases from ₹400 to ₹460, what is the percentage increase?
A) 10% B) 12.5% C) 15%

55. An article is bought for ₹800 and sold for ₹920. What is the profit percentage?
A) 12% B) 15% C) 18%

56. A shopkeeper sells an article at a loss of 10%. If the cost price is ₹600, find the selling price.
A) ₹540 B) ₹520 C) ₹560

57. An article is sold for ₹1,200 at a profit of 20%. What is the cost price?
A) ₹960 B) ₹1,000 C) ₹1,100

58. A trader buys an article for ₹500 and marks it at ₹650. He gives a discount of 10%. What is the profit or loss percentage?
A) 15% profit B) 20% profit C) 17% profit

59. A shopkeeper buys an article for ₹1,200 and sells it at a loss of 15%. What is the selling price?
A) ₹980 B) ₹1,080 C) ₹1,020

60. If an article is sold at 25% profit and the selling price is ₹1,000, find the cost price.
A) ₹750 B) ₹800 C) ₹850

SECTION 4 - TRIANGLES & QUADRILATERALS

61. A triangle with one angle measuring 90° is called a:
A) Acute triangle B) Obtuse triangle C) Right triangle

62. The point of intersection of the angle bisectors of a triangle is called the:
A) Incenter B) Centroid C) Orthocenter

63. In an isosceles triangle, the angles opposite the equal sides are:
A) Equal B) Different C) Right angles

64. In an obtuse-angled triangle, the largest angle is always:
A) Equal to 90° B) Greater than 90° C) Less than 90°

65. Triangle with sides 10 cm, 10 cm, and 14 cm:
A) Isosceles triangle B) Scalene triangle C) Equilateral triangle

66. Triangle with sides 15 cm, 15 cm, and 20 cm:
A) Scalene triangle B) Equilateral triangle C) Isosceles triangle

67. 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

68. Can a triangle be formed with sides 7 cm, 10 cm, and 15 cm?
A) Yes B) No C) Only if it is a right-angled triangle

69. The sum of the interior angles of any quadrilateral is always:
A) 180° B) 360° C) 540°

70. Which of the following quadrilaterals always has opposite sides equal in length?
A) Parallelogram B) Kite C) Trapezium

71. A regular polygon is defined as a polygon in which all sides and angles are:
A) Equal B) Parallel C) Unequal

72. How many diagonals are in a polygon with 6 sides (hexagon)?
A) 6 B) 9 C) 15

73. The sum of the interior angles of a triangle is:
A) 90° B) 360° C) 180°

74. If two angles of a triangle are 50° and 60°, the third angle is:
A) 60° B) 70° C) 80°

75. A quadrilateral has three angles measuring 80°, 95°, and 110°. Find the fourth angle.
A) 75° B) 65° C) 85°

76. If each angle of a regular polygon is 120°, the polygon is a:
A) Triangle B) Square C) Hexagon

77. If the angles of a triangle are in the ratio 2 : 3 : 4, the largest angle is:
A) 60° B) 80° C) 90°

78. If one angle of a parallelogram is 70°, then the measure of its adjacent angle is:
A) 70° B) 110° C) 90°

79. In a triangle, if two sides are 6 cm and 10 cm, the third side cannot be:
A) 5 cm B) 8 cm C) 17 cm

80. The sum of the interior angles of a pentagon is:
A) 360° B) 450° C) 540°

SECTION 5 – SIMPLE INTEREST

81. If the interest is ₹500, the principal is ₹5000 and the time is 2 years, the rate of interest is:
A) 5% B) 10% C) 2%

82. A sum of ₹2500 earns ₹500 as Simple Interest in 4 years. What is the rate of interest per annum?
A) 4% B) 5% C) 6%

83. If the principal was ₹6000, find total amount after 4 years at 4% simple interest?
A) ₹6,240 B) ₹6,960 C) ₹6,400

84. The time is 2 years, rate is 6% p.a., and the Simple Interest is ₹720, what is the principal?
A) ₹4,000 B) ₹6,000 C) ₹5,000

85. A man borrows ₹2500 at a rate of 4% p.a. for 3 years. How much interest does he pay?
A) ₹200 B) ₹400 C) ₹300

86. The total amount after 3 years is ₹6600, and the Simple Interest is ₹600. Find the principal.
A) ₹6,000 B) ₹5,500 C) ₹5,800

87. The Simple Interest on a certain sum for 3 years at 5% per annum is ₹450. Find the sum.
A) ₹2,500 B) ₹3,000 C) ₹5,000

88. At what rate will ₹7,200 yield ₹2,160 as Simple Interest in 6 years?
A) 3% B) 5% C) 6%

89. Total amount after 6 years is ₹28,800, and Simple Interest is ₹7,200. Find the principal.
A) ₹21,600 B) ₹20,000 C) ₹24,000

90. A man borrowed ₹18,000 at 9% per annum for 4 years. How much interest does he pay?
A) ₹5,400 B) ₹6,480 C) ₹7,200

91. A man invested ₹6000 in a scheme at 6% Simple Interest per annum. How much interest will he earn in 7.5 years?
A) ₹2,400 B) ₹3,000 C) ₹2,700

92. Aman borrowed ₹12,500 from a friend at 8% per annum for 4 years. How much interest will he pay?
A) ₹3,000 B) ₹4,000 C) ₹4,500

93. A person invests ₹15,000 at a rate of 6% per annum for 4 years. What will be the total interest earned?
A) ₹3,600 B) ₹3,400 C) ₹3,800

94. 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

95. A principal of ₹7500 is borrowed at 8% per annum for 2 years. What is the Simple Interest?
A) ₹1,200 B) ₹1,500 C) ₹800

96. For how many years will ₹6,000 amount to ₹7,200 at 5% p.a. simple interest?
A) 3 years B) 4 years C) 5 years

97. What principal will earn a simple interest of ₹1,800 at 9% p.a. in 4 years?
A) ₹4,500 B) ₹6,000 C) ₹5,000

98. If ₹8,000 is invested at 7.5% p.a. simple interest, what will be the interest after 2 years?
A) ₹1,000 B) ₹1,500 C) ₹1,200

99. A sum of money doubles itself in 10 years at simple interest. The rate of interest is:
A) 8% B) 10% C) 12%

100. The simple interest on ₹12,000 at 6% p.a. for 5 years is:
A) ₹3,000 B) ₹3,200 C) ₹3,600

ANSWER

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