Bhavan's Tripura Vidyamandir

1st Terminal Examination: (2024-2025)

Class:-6   **Subject: Mathematics**

Time: - 3 hours   Total: - 80 Marks

Name of the student: Roll: Section:

<u>General Instruction:</u>

- **Section A contains 15 questions (1 to 15) each carries 1 marks.**
- **Section B contains 1 case-study (16 to 20) each carries 1 marks.**
- **Section C contains 10 questions (21 to 30) each carries 2 marks.**
- **Section D contains 8 questions (31 to 38) each carries 3 marks.**
- **Section E contains 4 questions (39 to 42) each carries 4 marks.**

Section A

1. The equivalent ratio of $2:3$ is

   a) $4:5$ b) $6:4$ c) $4:6$ d) $5:6$

2. The fraction $\frac{22}{24}$ in the lowest term is

   a) $\frac{11}{24}$ b) $\frac{12}{24}$ c) $\frac{6}{12}$ d) $\frac{11}{12}$

3. When two lines in the same plane do not meet each other, they are called

   a) Intersecting lines   b) Perpendicular lines

   c) Parallel lines   d) Concurrent lines

4. If the given quantities $4, 3, 8$ and 6 are in proportion then the extreme terms are

   a) 4 and 6   b) 3 and 4   c) 8 and 6   d) 2 and 8

5. Which of the following is the proper fraction?

   a) $\frac{15}{11}$ b) $\frac{13}{11}$ c) $\frac{10}{11}$ d) $\frac{14}{11}$

6. The HCF of 7 and 10 is

   a) 1   b) 7   c) 10   d) 70

7. Straight angle is

   a) more than half revolution   b) half revolution

   c) one fourth of a revolution   d) one complete revolution

8. The cost of 12 bottles of mineral water is ₹ 120. What will be the cost of 1 bottle?

   a) ₹ 12   b) ₹ 10   c) ₹ 16   d) ₹ 20

9. What part of an hour is 35 minute?

   a) $\frac{5}{12}$ b) $\frac{6}{12}$ c) $\frac{7}{12}$ d) $\frac{8}{12}$

10. In a clock, 30 minutes is equal to how many right angle made by minute's hand?

   a) 1   b) 2   c) 3   d) 4

11. In 35682 the place value of 8 is-

   a) 60   b) 800   c) 80   d) 8

12. The successor of 99 is-

   a) 10   b) 100   c) 1000   d) 98

13. The biggest 3 digit number is –

   a) 998   b) 9999   c) 999   d) 99

14. 16 is a factor of –

    a) 8   b) 4   c) 2   d) 16

15. The LCM of 4 and 5 is –

    a) 4   b) 5   c) 10   d) 20

Section B

Ayush and Aditya went to the market to buy fruits. They both decided to share the cost of fruits equally. Ayush bought 8 kilogram apples and Aditya bought 6 kilogram of mangoes. The cost of per kilogram of apples is Rs.120 and the cost of per kilogram of mangoes is Rs.100. Based on the above information, answer the following question.

16. The ratio of the weight of apples to the weight of the mangoes is

    a) $5:6$ b) $4:3$ c) $6:5$ d) $3:4$

17. What is ratio of the cost of one kilogram of apple to the cost of one kilogram of mango is

    a) $5:2$ b) $4:3$ c) $6:5$ d) $3:4$

18. The amount spent on apples is

    a) ₹ 750   b) ₹ 600   c) ₹ 960   d) ₹ 900

19. The total amount spent by them together on fruits is

    a) ₹ 1560   b) ₹ 1160   c) ₹ 1260   d) ₹ 960

20. How much money does each of them contribute?

    a) ₹ 880   b) ₹ 860   c) ₹ 760   d) ₹ 780

Section C

21. Find the value of x such that x, 90, 135 and 45 are in proportion.

22. Replace * with correct numbers $\frac{2}{7} = \frac{8}{*}$

23. Find the prime factorisation of 1035

24. Without performing actual division, check whether the number 2357 is divisible by 9 or not?

25. State whether the statement is True or False.

    i) A ray can be extended infinitely on either side.

    ii) A line has two end points.

26. A person earns ₹ 15300 and saves ₹ 900 per month. Find the ratio of his income to his expenditure in a month.

27. Find the sum : $\frac{2}{9} + \frac{5}{6}$

28. Draw the factor tree of 120.

29. Fill in the blanks –

    a) 1 million = _____ lakhs.

    b) 10 million = _____ crores.

30. Using number line find:

    9 – 6

    (Draw the number line with scale and pencil)

Section D

31. If 3 meters of cloth cost ₹ 450, what will be the cost of 20 meters of cloth?

32. Find the HCF by listing the factors of the numbers 12 and 18.

33. i) An angle which is more than $180°$ but less than $360°$ is called a _____ angle.

　　ii) A point has no _____.

　　iii) The measure of a straight angle is _____.

34. Find the LCM of 16, 24, 48.

35. Sourav drank $\frac{3}{4}$ of a bottle of milk and her sister drank $\frac{4}{5}$ of a bottle of milk. If the bottles

　　are of the same size, who drank more and by how much?

36. Express as roman numerals:

　　i)　80

　　ii)　400

　　iii)　900

37. Find the product by suitable rearrangement:

　　a)　$2 \times 728 \times 50$

　　b)　$4 \times 961 \times 25$

38. i. Without performing actual division check whether 4345 is divisible by 11.

　　ii. How many factors does a prime number have?

Section E

39. There are 20 girls and 16 boys in a class.

　　a. What is the ratio of the number of girls to the number of boys?

　　b. What is the ratio of the number of boys to the total number of students?

40. True or False:

　　i)　1 is neither prime nor composite number.

　　ii)　2 is the smallest prime number.

　　iii)　Two consecutive numbers are not co-prime.

　　iv)　2 is the only prime number which is even.

41. Find the greatest number that will divide 50 and 60 leaving remainder 8 and 4 respectively

42. i. Subtract $\frac{7}{20}$ *from* $\frac{3}{5}$

　　ii. Add $\frac{3}{8}$ *to* $\frac{5}{12}$