St. Thomas School, Sahibabad
Annual Examination Worksheet (2023-2024)
Class: VI
Mathematics (041)

Time:3Hours   MM:80

GENERAL INSTRUCTIONS:

- This paper consists of 38 questions divided in five sections.
- Section A consists of 20 MCQs of 1 mark each, Section B consists of 5 questions of 2 marks each, Section C consists of 6 questions of 3 marks each, Section D consists of 4 questions of 5 marks each, Section E consists of 3 case-based questions of 4 marks each.
- Attempt all the questions.

Section- A

Choose the correct option.

1. Area of a rectangle with length 5 cm and breadth 3 cm is_____.   1

    (a) 8 sq. cm   (b) 15 sq. cm   (c) 2 sq. cm   (d) none of these

2. $15.8 - 6.73$ is equal to   1

    (a) 8.07   (b) 9.13   (c) 9.07   (d) 9.25

3. 0.023 lies between   1

    (a) 0.2 and 0.3   (b) 0.02 and 0.03   (c) 0.03 and 0.029   (d) 0.026 and 0.024

4. $\frac{24}{11}$ is an example of   1

    (a) a proper fraction   (b) an improper fraction   (c) a mixed fraction   (d) none of these

5. If two lines have only one point in common, what are they called?   1

    (a) Parallel lines   (b) Intersecting lines   (c) Perpendicular lines   (d) Transversal

6. $10 + 2 + \frac{1}{10} + \frac{2}{100} =$ 1

    (a) 12.12   (b) 12.21   (c) 11.11   (d) 21.12

7. The first and the fourth terms of a proportion are called _____.   1

    (a) Extreme terms   (b) Middle terms   (c) Respective terms   (d) None of these

8. The number of right angles turned through by the hour hand of a clock when it goes from 5 to 11   1

    is

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

9. The perimeter of the given figure is   1

    (a) 20 cm   (b) 10 cm   (c) 15 cm   (d) 25 cm
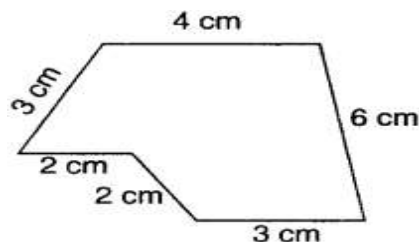
10. $\frac{3}{2}$ right angles = ____   1

    (a) 115 °   (b) 135 °   (c) 230 °   (d) 270 °

11. Find the distance covered by Iti, if she takes 1 round of a park which is 20 m long and 10 m wide.   1

    (a) 30 m   (b) 20 m   (c) 60 m   (d) 10 m

12. In a pictograph, if a symbol Δ represents 15 houses, then ΔΔΔΔ stands for _____houses.   1

    (a) 40   (b) 20   (c) 15   (d) 60

13. If there are 36 spokes in a bicycle wheel, then the angle between a pair of adjacent spokes is   1

    (a) 15 °   (b) 12 °   (c) 10 °   (d) 18 °

14. Equivalent fraction of $\frac{36}{63}$ with numerator 4 is :   1

    (a) $\frac{3}{4}$ (b) $\frac{4}{7}$ (c) $\frac{4}{3}$ (d) $\frac{7}{4}$

15. $\frac{2}{3} + \frac{3}{4} + \frac{1}{2}$ is equal to: 1

    (a) $\frac{5}{6}$ (b) $\frac{11}{12}$ (c) $1\frac{9}{12}$ (d) $\frac{23}{12}$

16. The ratio of 90 cm to 1.5 m is   1

    (a) 3:5   (b) 5:3   (c) 60:1   (d) 4:3

17. How many lines can be drawn through one given point?   1

    (a) one   (b) two   (c) three   (d) infinite

18. What fraction of clockwise revolution does the hour hand of a clock turn through when it goes from 6 to 3.   1

    (a) $\frac{3}{8}$ (b) $\frac{1}{8}$ (c) $\frac{1}{2}$ (d) $\frac{3}{4}$

In Question 19 and 20, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct option.

19. Assertion: The ratio 4:16 is in its lowest form is 1:4   1

    Reason: We can get equivalent ratios by multiplying or dividing the numerator and denominator by the same number.

    (a) Both Assertion and Reason are the true and Reason is a correct explanation of Assertion.

    (b) Both Assertion and Reason are the true but Reason is not a correct explanation of Assertion.

    (c) Assertion is true but Reason is false.

    (d) Assertion is false but Reason is true.

20. Assertion: 2.3 lies between 1 and 2.   1

    Reason: To convert a decimal to a fraction, place the decimal number over its place value.

    (a) Both Assertion and Reason are the true and Reason is a correct explanation of Assertion.

    (b) Both Assertion and Reason are the true but Reason is not a correct explanation of Assertion.

    (c) Assertion is true but Reason is false.

    (d) Assertion is false but Reason is true.

Section-B

21. A father wants to divide ₹ 5000 between his two sons in the ratio of their ages. If the younger son   2
    is 3 years old and the elder son is 7 years old, find the share of younger son.

22. Simplify: $26.377 - 5.033 - 12.564 + 125.307$ 2

23. Represent $\frac{2}{5}$ on number line.   2

24. Name the types of following triangles: 2

i. $\triangle ABC$ with $m\angle B = 90°$ and $AB = BC$.

ii. $\triangle PQR$ with $PQ = QR = PR = 5$ cm.

25. Compare the fractions $\frac{7}{12}$ and $\frac{9}{16}$.   2

Section-C

26. Kunal purchased a notebook for ₹ 19.75, a pencil for ₹ 3.85 and a pen for ₹ 8.35 from a bookshop.   3
    He gave a 50 rupee note to the shopkeeper. What amount did she get back?

27. The blood group of 25 students are recorded as under: 3

    A , B , O , A , AB , O , A , O , B , A , B , A , O , B , AB , A , AB , A , B , B , O , B , AB , O , A.

    Arrange the information in a table using tally marks.

28. If 30 : x :: 55 : 11 are in proportion, then find the value of x. Also, write the middle terms.   3

29. A film show lasted for $3\frac{1}{3}$ hours. Out of this time, $1\frac{3}{4}$ hours was spent on advertisements. What   3
    was the actual duration of the film?

30. A truck requires 54 litres of diesel for covering a distance of 297 km. How much diesel will be   3
    required by the truck to cover a distance of 3300 km?

31. Riya walks around a square park twice and covers 1600 m. What will be the area of this park?   3

Section-D

32. The perimeter of a rectangular garden is 48 m with length 14 m. Three square flower beds of side   5
    3 m cover an area inside the garden. Find the remaining area of garden which is not covered by
    flower beds. If total cost of fencing the garden is ₹2400, then find the cost of fencing per meter.

33. Subtract the sum of $3\frac{5}{9}$ and $3\frac{1}{3}$ from the sum of $5\frac{5}{6}$ and $4\frac{1}{9}$.   5

34. Name each of the following Quadrilaterals: 5

i.   One pair of parallel sides

ii.   Two pairs of parallel sides

iii. Parallelogram with 4 right angles

iv.   Parallelogram with 4 sides of equal length

v.   A rhombus with 4 right angle.

35. Gopal travelled 5 km 750 m by taxi and 3 km 430 m by bus to reach his office. While Rohit   5
    travelled 6 km 670 m by train and then walked 1 km 100 m to reach his office. Who covered more
    distance and by how much?

<div align="center">Section-E</div>

36. Students of Class VI in a school were given a task to count the
    number of articles made of different materials in the school.
    The adjoining pictograph represents the information collected
    by them. Observe the pictograph and answer the following
    questions:
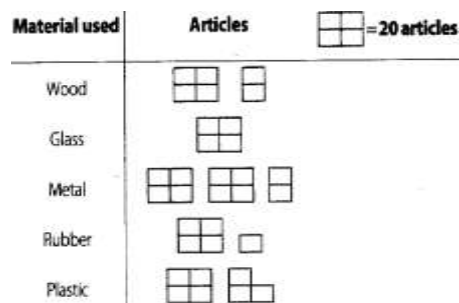
i.   Which material is used in maximum number of articles?   1

ii.   Which material is used in exactly half the number of articles as those made up of metal?   1

iii. Find out the difference between number of articles made up of plastic and glass.   2

37. Robin wants to cover the rectangular floor of a room 8 m long with perimeter 48 m by square
    tiles. Each square tile is of side 1 m. Also, the cost of tiling the floor is ₹100 per sq. m.

i.   What is the width of the rectangular floor?   1

ii.   What is the perimeter of each tile?   1

iii. Find the total cost required for tiling the floor.   2

38. In a club having 100 members, 20 play carom, 40 play tennis and 16 play badminton and the
    remaining member do not play any game. No member play more than one game.

i.   Find the ratio of members who play carom to the number of members who play tennis.   1

ii.   Find the ratio of members who play tennis to those who play badminton.   1

iii. Find the ratio of total members to the number of members who do not play any game.   2