CLASS : VII - MATHEMATICS.

SA2 - MODEL QUESTION PAPER. M&M : 60

SECTION-A. 8×1 = 8

Q.NO. 1 to 8 are of 1 mark each.

1. Which is greater of $\frac{-3}{4}$ and $\frac{2}{-3}$?
2. If $\Delta DEF \cong \Delta BCA$, write the Part of ΔBCA that correspond to $\overline{DF}$.
3. Find 25% of ₹ 2500.
4. Identify terms and their factors in $2x^2y^2 + xy$.
5. Draw a net for cylinder.
6. The Perimeter of a rectangle is 130cm. If the breadth of the rectangle is 30 cm, find its ~~breadth~~ length.
7. If the circumference of a circular Sheet is 154 m, find its radius. $(\pi = \frac{22}{7})$
8. Name any two 2-D figures that have both line symmetry and rotational symmetry.

SECTION-B. 6×2 = 12.

Q. NO. 9 to 14 are of 2 marks each.

9. a. Rewrite $\frac{-8}{10}$ in the simplest form.

   b. Represent $\frac{3}{4}$ on the number line
10. Find the Sum of : $\frac{5}{3} + \frac{3}{5}$.
11. Convert (a) $\frac{5}{4}$ (b) 0.09 to Percents.
12. If $a = 2$, $b = -2$, find the Value of a^2+ab+b^2.
13. A circular flower bed is surrounded by a path 4m wide. The diameter of the flower bed is 66m. What is the area of this Path? $(\pi = 3.14)$.

SECTION-C. $8 \times 3 = 24$.

Q.NO. 15 to 22 are of 3 marks each.

15. Find: (a) $-2\frac{1}{9} - 6$ (b) $\frac{3}{7} \times -\frac{2}{5}$.

16. ABC is an isosceles triangle with AB = AC and AD is one of its altitude. (i) Is $\triangle ADB \cong \triangle ADC$? Justify your answer.

(ii) Is $\angle B = \angle C$? why or why not?

iii) Is BD = CD? why or why not?

17. Ram bought a car for ₹ 3,50,000. The next year, the price went up to ₹ 3,70,000. What was the percentage of price increase?

18. A local cricket team played 20 matches in one season. It won 25% of them. How many matches did they win?

19. (a) what should be added to $x^2 + xy + y^2$ to obtain $2x^2 + 3xy$?

(b) what should be subtracted from $2a + 8b + 10$ to get $-3a + 7b + 16$?

20 If $p = -10$, find the value of $p^2 - 2p - 100$.

21. $\triangle ABC$ is isosceles with AB = AC = 7.5 cm and BC = 9 cm. The height AD from A to BC is 6 cm. Find the area of $\triangle ABC$. what will be the height from C to AB (ii) CE?

22. (i) what name can you give to the line of symmetry of (a) an isosceles triangle (b) a circle.

ii) what letters of the English alphabets have reflectional symmetry about both horizontal and vertical mirrors.

SECTION-D. $4 \times 4 = 16$.

Q. No. 23 to 26 are of 4 marks each.

23. Find the value of: (a) $\frac{-7}{12} \div \frac{-2}{13}$ (b) $\frac{-1}{8} \div \frac{3}{4}$.

24. Find the amount to be paid at the end of 3 years on principal ₹ 1200 at 12% P.a.

25. From the sum of $4 + 3x$ and $5 - 4x + 2x^2$, subtract $-x^2 + 2x + 5$.