विद्या सर्वार्थ साधिका

ANANDALAYA

PERIODIC TEST – 3

CLASS – VII

Subject: Mathematics M.M: 50

Date : 03/01/2020 Time: 2 hours

General Instructions:

1. All questions are compulsory.
2. This question paper contains 22 questions.
3. Questions 1 – 7 in Section A are very short-answer type questions carrying 1 mark each.
4. Questions 8 – 13 in Section B are short-answer type questions carrying 2 marks each.
5. Questions 14 – 18 in Section C are short -answer type questions carrying 3 marks each.
6. Questions 19 – 22 in Section D are long-answer type questions carrying 4 marks each.

SECTION-A

1. Name the congruence criterion in which two sides and included angle of one triangle is equal to two corresponding sides and the included angle of other triangle. (1)

2. Find the ratio of 7 m to 21cm. (1)

3. Write the rational number $\frac{35}{-42}$ in its standard form. (1)

4. Find the area of a square whose perimeter is 40 m. (1)

5. Two angles are congruent and one of them is of measure 70^{o} , then find the measure of other angle. (1)

6. Find which one is greater of the rational numbers $\frac{-3}{5}$ and $\frac{-5}{8}$. (1)

7. Find the area of a circle whose radius is 3.5m. (1)

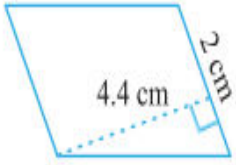
SECTION-B

8. If Δ PQR $\cong$ Δ CAT , write the part(s) of Δ CAT that correspond to : (2)
   (i) $\angle$ R (ii) $\overline{TC}$ (iii) $\angle$ PQR (iv) $\overline{PQ}$

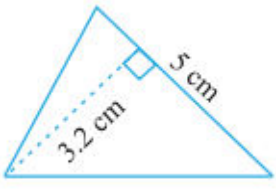
9. Find (i) 25% of ` 250 (ii) 5 % of an hour (2)

10. Write four more rational numbers in the following pattern: (2)
    $\frac{-1}{6}, \frac{2}{-12}, \frac{3}{-18}$ --- --- --- ---

11. Find the area of the following figures: (2)
    (i)



    (ii)

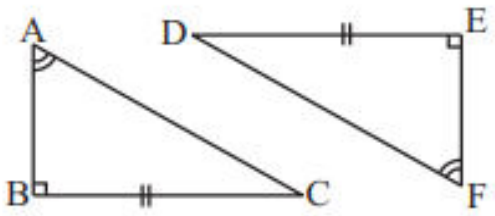


12. The population of a city decreased from 50000 to 49500. Find the percentage decrease. (2)

13. A wire is in the shape of a rectangle. Its length is 45 cm and breadth is 25 cm. If the same wire is rebent into a square, What will be measure of each side? (2)

SECTION-C

14. Explain, why $\Delta ABC \cong \Delta FED$. (3)



15. Find the amount to be paid at the end of 3 years if the principal is ` 1500 and rate of interest is 11%. (3)

16. List four rational numbers between $\frac{-4}{5}$ and $\frac{-2}{3}$. (3)

17. Construct a triangle ΔPQR if PQ = 7 cm, $m\angle PQR = 85^\circ$, $m\angle QRP = 35^\circ$. (3)

18. A gardener wants to plant grass in a circular garden of circumference 308 m at the rate of ` 450 per 100 m^2. Find the total cost. (3)

SECTION-D

19. Saina bought a car for ` 4,50,000 . The next year the price went upto ` 5,00,000. Find the percentage increase. (4)

20. Find the value of : (4)
(i) $-2\frac{1}{3} + 2\frac{3}{5}$ (ii) $\frac{11}{39} \div \left(\frac{-33}{65}\right)$

21. (a) Draw a line of length 10 cm. Take a point R outside the line. Through R , draw a line parallel to the given line. (4)
(b) Construct a triangle with sides 5 cm , 6 cm and 7 cm

22. Shazli took a wire of length 44 cm and bent it into the shape of a circle. Find the radius of the circle. If the same wire is bent into shape of a square, what will be the length of each of its sides? Which figure encloses more area, the circle or the square? (Take $\pi = \frac{22}{7}$) (4)