

ST. MARGARET SR. SEC. SCHOOL SAMPLE PAPER MID TERM EXAMINATION 2023-24 MATHEMATICS CLASS VII

M.M: 60 Time: 2.5 Hrs **IMPORTANT INSTRUCTIONS:** 1) All questions are compulsory. 2) Q.1 to Q.15 carry 1 mark each (MCQ). 3) Q.16 to Q.22 carry 2 marks each. 4) Q.23 to Q.27 carry 3 marks each. 5) Q.28 to Q.31 carry 4 marks each. Q1. The next number in the pattern -62, -37, -12, ______ is: (a) 25 (b) 13 (c) 0 (d) -13 Q2. The measure of the supplementary angles is (a) 180° (b) 160° (c) 90° (d) 80 ° Q3. ______ is not the measure of central tendency of the data. Mean (b) Median (c) Mode (d) Tally marks Q4. Area of right-angled triangle is 30cm². If its smallest side is 5 cm, then its hypotenuse is: (b) 13 cm (a) 14 cm (c) 12 cm (d) 11 cm Q5. The mode of the distribution: 2,3,4,7,5,1,6,6,4,5,3,2,2,4,5,4 (a) 1 (b) 2 (c) 4 (d) 3 Q6. Find the value of $(-45) \times (2) \times (-10) =$? (a) 900 (b) 90 (c) -900 (d)-90 Q7. The successor of the predecessor of -50 is _____ (a) -50 (b) 50 (c) -49 (d) -51 Q8. The interest on ₹20000 for 5 years at the rate off 15% per annum is _____ (a) ₹1500 (b) ₹18000 (c) ₹10000 (d) ₹15000 Q9. The value 15.8 – 6.73 is _____ (a) 8.07 (b) 9.07 (c) 9.13 (d) 9.25 Q10. When two positive integers are subtracted, we get (a) a positive integer (b) a negative integer (c) integer of any sign (d) none of these Q11. Evaluate: [(-34) ÷ (-17)] X 5 = (a) 10 (b) -10 (c) -9 (d) 9 Q12. If the arms of an angle increases on the paper, the angle _____ (a) increases (b) decreases (c) remains same (d) can be any

Q13. 0.76 is equal to _____ (b) 7600% (c) 7.60% (a) 76% (d) 0.76% Q14. Which of the following is an equivalent fraction of $\frac{2}{2}$ (d) $\frac{10}{15}$ (b) $\frac{6}{13}$ (C) $\frac{8}{11}$ (a) $\frac{4}{2}$ Q15. Which of the following is true for $\frac{11}{16} - \frac{14}{15}$? (b) < (c) =(a) >(d) none Q16. Find the area of rectangle whose length is 9.8 cm and breadth is 7 cm. 53 X (-9) – (-109) X 53 Q17. Find the product, using suitable property: Q18. Divide $\frac{3}{10}$ by $(\frac{1}{4} of \frac{3}{5})$ Q19. What is the cost of 27.5m of cloth at ₹53.50 per metre? Q20. On selling an article for ₹3290, a dealer lost 6%. Find the cost price of the article. Q21. The population of a village is 8000. Out of these, 80% are literate and of these literate people, 40% are women. Find the ratio of the number of literate women to the total population. Q22. Find the base, if the area of the parallelogram is 49cm² and height is 7cm. Q23. The circumference of a circle is 6.28 cm. Find the radius and the area of the circle? $(Take \pi = 3.14)$ Q24. Find the amount to be paid at the end of 9 years if Principal is ₹2400 at 15% per annum. Q25. Vardaan ordered a watch for ₹ 9,00,000. After few years, its price reduced to ₹ 8,50,000. What was the percentage loss? Q26. Verify that $a \div (b + c) \neq (a \div b) + (a \div c)$ for each of the following values of a = -8, b = -3 and c = 5Q27.State the property that is used in each of the following statements: a) If $| \parallel m$, then $\angle 4 = \angle 8$ b) If $\angle 3 = \angle 5$, then $| \parallel m$. c) If $\angle 3 + \angle 8 = 180^\circ$, then $| \parallel m$. Q28. Consider this data collected from a survey of a country. Draw a bar graph choosing an appropriate scale.

Colour	Red	Blue	Silver	Orange	Green
No. of flags	656	756	856	956	556

Q29. The height of 15 girls were measured in cm and the results are as follow:

118, 123, 124, 125, 127, 128, 129, 130, 130, 133, 136, 138, 141, 142, 149,

- a) What is the range of the data?
- b) What is the mean height of the girls?
- c) How many girls have heights more than the mean height?
- d) What is the height of the tallest girl?

Q30. The figure shows two circles with the same centre. The radius of the larger circle is 10 cm and the radius of the smaller circle is 4 cm. Find the shaded area between two circles. (Take π = 3.14)



Q31. In the adjoining figure, $h \parallel w$. Find the unknown angles.

