

MARTHOMA RESIDENTIAL SCHOOL, TIRUVALLA

FIRST TERMINAL EXAMINATION 2017-18

MATHEMATICS

Standard VIII

Time: 2 hrs
Marks: 80

- I. (a) Simplify by rationalizing the denominator $\frac{\sqrt{5}}{3-\sqrt{2}}$. (3)
(b) The salary of Radha increased in the ratio 6:7. If the original salary was Rs.21600, find her new salary. (3)
(c) Find L.C.M of 294, 420, 504. (4)
- II. (a) Write the following ratio in descending order 1:3, 2:5, 7:15 and 5:6. (3)
(b) Find fourth proportional to 3.6, 6.4 and 1.8. (3)
(c) If a car dealer sells a car for Rs. 67680, he will lose 6%. For what amount should he sell it so as to gain 6%. (4)
- III. (a) A, B and C are three quantities of same kind. Their ratio are $A:B = 3:4$ and $B:C = 7:8$. Find the ratio $A:C$ and $A:B:C$. (3)
(b) Insert three fractions between $\frac{2}{3}$ and $\frac{7}{9}$. (3)
(c) In an examination the pass mark is 40%. If a candidate gets 65 marks and fails by 3 marks, find the maximum marks. (4)
- IV. (a) Find the selling price if C P= Rs.950 and profit =8%. (3)
(b) A gets 20% more salary than B. By what percent is B's salary less than A's salary. (3)
(c) Simplify by rationalizing the denominator (i) $\frac{3}{\sqrt{5}+\sqrt{3}}$ (ii) $\frac{1}{4-\sqrt{3}}$. (4)
- V. (a) Find the HCF of 540, 720, 450. (3)
(b) If 12% of a certain amount is Rs.570, find the amount. (3)
(c) In an election a candidate secured 58% of votes polled and won the election by 18336 votes. Find the total number of votes polled and the votes secured by each candidate. (4)
- VI. (a) Find the HCF of $\frac{2}{3}, \frac{8}{9}, \frac{10}{15}$. (3)
(b) The cost price of 10 articles equal to the selling price of 9 articles. Find the profit percent. (3)
(c) Two numbers are in the ratio 5:4. If 3 is subtracted from the first and 2 is subtracted from the second they become in the ratio 6:5. Find the numbers. (4)

- VII. (a) Find the greatest number of four digits which is divisible by 15, 25, 40 and 75. (3)
(b) Rs.581 is divided into three parts such that 4 times the first is equal to 5 times the second and equal to 7 times the third . Find the three parts. (3)
(c) The product of two numbers is 20736 and their HCF is 24. Find their LCM. (4)
- VIII. (a) Rs.510 be divided among A, B and C in such a way that A gets $\frac{2}{3}$ of what B gets and B gets $\frac{1}{4}$ of what C gets. Find the share of each. (3)
(b) Ramu`s income was increased by 10% and later decreased by 10%. What is the total change in percentage in Ramu`s income? (3)
(c) An article is marked at Rs.2250. By selling it at a discount of 12% the dealer makes a profit of 10%. Find (i) the selling price of the article. (ii) the cost price of the article for the dealer. (4)