

MAR THOMA RESIDENTIAL SCHOOL, THIRUVALLA

First Term Examination 2019 - 20

Mathematics

Class – VIII

Time : 2½ hr

Mark : 80

I.

- a) Evaluate (3)

$$\left(\frac{11}{9}\right)^{-7} \times \left(\frac{9}{11}\right)^{-8}$$

- b) Evaluate (3)

$$55\% \text{ of } 160 + 24\% \text{ of } 50 - 36\% \text{ of } 150$$

- c) Find the smallest number by which 2592 is multiplied to make it a perfect square. (4)

II.

- a) Evaluate $\frac{1}{4} + \frac{5}{6} - \frac{1}{12}$ (3)

- b) Raman spend 70 % of his salary every month. If he saves Rs 900 every month, find the following (3)

- His monthly salary
- His monthly Expenditure

- c) Evaluate (4)

$$\left(\frac{x^4 y^3 z^2}{x y^2 z^4}\right)^2$$

III.

- a) By what number must $\frac{-5}{8}$ be multiplied so that the product is $\frac{3}{4}$ (3)

- b) Evaluate $(4^7)^2 \times (4^{-3})^4$ (3)

- c) Find the square root of 276676 (4)

IV.

- a) The students of class VIII of a school donated Rs. 2601 for natural relief fund. If each student donated as much money as the number of students, find the number of students in the class (3)

- b) Sunil lost 10% by selling an article for Rs 2700. At what price he would have sold to gain 18%. (3)

c) Evaluate

$$\frac{4}{7} - \frac{-8}{9} - \frac{-13}{7} + \frac{17}{9}$$

V.

a) Evaluate $(125)^{-2/3} \div (8)^{2/3}$ (3)

b) Evaluate $\frac{\sqrt{169} - \sqrt{144}}{\sqrt{256} + \sqrt{9}}$ (3)

c) In an examination 30 percent candidates failed in English, 35 percent failed in mathematics and 27 percent failed in both subject find (i) percentage of total failed (4)
(ii) percentage of total passed

VI.

a) Evaluate $\sqrt{1 \frac{155}{169}}$ (3)

b) Evaluate $\frac{x^{5+n} \times (x^2)^{3n+1}}{x^{7n-2}}$ (3)

c) In an election out of two candidates a candidate got 47% of votes and lost by 24,732 votes find the following (4)
(i) The number of votes polled
(ii) The number of votes of the winning candidates

VII.

a) Rajesh buys pencils at 5 for Rs 20 and sells them at 6 for Rs 25. Find his gain or loss. (3)

b) Evaluate $\left(\frac{x^a}{x^b}\right)^{a+b} \times \left(\frac{x^b}{x^c}\right)^{b+c} \times \left(\frac{x^c}{x^a}\right)^{c+a}$ (3)

c) In a test, the pass mark are 40%, Ajay got 69 marks and failed by 3 marks. find the total mark of the test (4)

VIII.

a) If 17% of a number is 153 find the number (6)

b) A dealer sold 2 TV for Rs 2400. Each, gaining 20% on first TV and loosing 20% on the second TV. Find his net gain or loss and express it as percent? (6)

c) Draw a number line and mark (4)

$\frac{2}{3}$, $\frac{4}{3}$, $\frac{-5}{3}$, and $\frac{-7}{3}$ on it