

SUMMATIVE ASSESSMENT-I, 2016

MATHEMATICS

Time : 3 hrs.

Class VIII

M.M: 100

Date – 14.09.2016

General Instructions:

- All questions are compulsory. There is no overall choice in these questions.
- The question paper consists of **34** questions divided into four sections A , B , C and D. **Section A** contains **4** questions of **1** mark each . **Section B** contains **7** questions of **2** marks each. **Section C** contains **10** questions of **3** marks each. **Section D** contains **13** questions of **4** marks each.
- Use of calculator is not permitted.
- Draw neat diagrams wherever necessary.
- Show the required calculations in fair.

SECTION – A

- Q.1 The other name of multiplicative inverse is _____.
- Q.2 The solution of equation $3x - 1 = 5$ is _____.
- Q.3 What is the square of 25?
- Q.4 Find the cube root of 512.

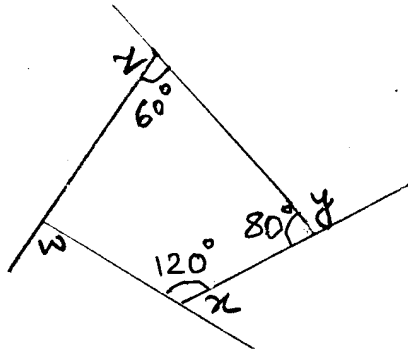
SECTION – B

- Q.5 72% of 25 students are good in Mathematics. How many are not good in Mathematics?
- Q.6 Find the smallest number by which 243 must be divided to obtain a perfect cube.
- Q.7 Express $(21)^2$ as the sum of two consecutive integers.
- Q.8 Is 0.3 the multiplicative inverse of $3\frac{1}{3}$? why or why not?
- Q.9 Express 64 as the sum of 8 odd numbers.
- Q.10 Solve the linear equation $3(t - 3) = 5(2t + 1)$
- Q.11 How many numbers lie between squares of 25 and 26?

SECTION – C

- Q.12 Construct a square of side 4.5cm.
- Q.13 Write four rational numbers between $\left(-\frac{3}{2}\right)$ and $\frac{5}{3}$.
- Q.14 Construct a parallelogram MORE where OR=6cm, RE=4.5cm and EO=7.5cm.
- Q.15 A grandfather is ten times older than his granddaughter. He is also 54 years older than her. Find their present ages.
- Q.16 Construct the quadrilateral GOLD, where OL=7.5 cm, GL=6cm, GD=6cm, LD=5cm, OD=10cm.
- Q.17 Find a Pythagorean triplet in which one member is 12.
- Q.18 Find the smallest number by which 68600 must be multiplied to get a perfect cube.

Q.19 Find the value of unknown angles x , y , z and w .



Q.20 Find CI paid when a sum of Rs 18000 is invested for $2\frac{1}{2}$ years at 10% per annum compounded annually.

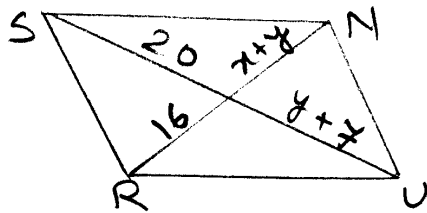
Q.21 How many sides does a regular polygon have if the measure of an exterior angle is 24° ?

SECTION – D

Q.22 Find $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{14} - \frac{3}{7} \times \frac{3}{5}$

Q.23 Solve $\frac{6x+1}{3} + 1 = \frac{x-3}{6}$

Q.24 RUNS is a parallelogram. Find x and y .



Q.25 Construct a rhombus BEND of diagonals $BN=5.6$ cm and $DE=6.5$ cm. Write the steps of construction.

Q.26 Find the square root of 9604 by prime factorisation method.

Q.27 Find the cube root of 10648.

Q.28 The rent of a house was increased from Rs 2500 to Rs 3000. Find the percentage increase in the rent.

Q.29 The length of a rectangle is 15 cm greater than its breadth. Its perimeter is 150 cm. Find the dimensions of the rectangle.

Q.30 What smallest number must be subtracted from 6156 to make it a perfect square?

Q.31 Minu bought two fans for Rs 1200 each. She sold one at a loss of 5% and the other at a profit of 10%. Find the selling price of each. Also find out the total profit or loss.

Q.32 State and prove angle sum property of a quadrilateral.

Q.33 A girl instead of distributing sweets on her birthday decides to distribute apples in various organisations. Half the apples she distributed in orphanage, three fourth of the remaining were distributed in a school for blind and remaining 20 were distributed to the poor children. Find the number of apples she had. Mention the value depicted by the girl.

Q.34 Find the square root of 7921 by division method.

