

Gyan Bharati School
Summative Assessment – 1 (2016-2017)
Class - M3
Subject- Mathematics

DIPESH M3-D
Roll no. - 6

Time Allowed : Two Hours

M.M. 50

General Instructions :

- a) Section A has Ques. 1 to Ques. 4 of 1 mark each.
- b) Section B has Ques. 5 to Ques. 10 of 2 marks each.
- c) Section C has Ques. 11 to Ques.16 of 3marks each.
- d) Section D has Ques. 17 to Ques. 20 of 4 marks each.
- e) All questions are compulsory.

Section A

Choose the correct option

- Q.1 The product of a rational number and its reciprocal is (1)
(a) 0 (b) 1 (c) -1 (d) none of these.
- Q.2 Which of the following is the linear equation (1)
(a) $x+3=0$ (b) $5x^2-9$ (c) $9x+6x^3$ (d) none of these.
- Q.3 The number of digits in the square root of 298116 is (1)
(a) 4 (b) 5 (c) 6 (d) 3.
- Q.4 A regular polygon means (1)
(a) equilateral (b) equiangular (c) (a) & (b) both (d) none of these.

Section B

- Q.5 Sum of two numbers is 108. If one exceeds the other by 42, find the numbers. (2)
- Q.6 Find four rational numbers between $-\frac{5}{3}$ and $-\frac{5}{4}$. (2)
- Q.7 The adjacent sides of a parallelogram are in the ratio 7 : 2 .If perimeter of the parallelogram is 36 , find all the sides. (2)
- Q.8 Number of children belonging to 20 families are as follows : (2)
5, 2, 3, 3, 1, 2, 2, 4, 2, 5, 4, 1, 1, 2, 3, 4, 3, 2, 1, 1 .
Draw a frequency distribution table.
- Q.9 An unbiased dice is thrown .What is the Probability of getting (2)
{1} an odd number.
{2} a number between 2 and 5 .
- Q.10 Solve for x : $\frac{(2x+3)-(5x+7)}{6x+11} = -\frac{8}{9}$ (2)

Section C

- Q.11 Find the square root of 298116 by long division method . (3)
- Q.12 The students of Class VIII of a school donated Rs 2401 in all, for Prime Minister's

National Relief Fund. Each student donated as many rupees as the number of students in the class. Find the number of students in the class. (3)

Q.13 Construct a quadrilateral RUSH, such that $RU=5.6\text{cm}$, $\angle U=105^\circ$, $SH=5\text{cm}$, $US=6\text{cm}$, and $UH = 4.5\text{cm}$. (3)

Q.14 The sum of interior angles of a polygon is three times the sum of its exterior angles. Determine the number of sides of the polygon. (3)

Q.15 Evaluate $\sqrt[3]{-\frac{2197}{125}} + \sqrt[3]{\frac{13824}{27}}$ (3)

Q.16 Simplify $\left\{\frac{3}{5} + \frac{2}{9} \cdot \frac{6}{5} - \frac{7}{3} \div \frac{5}{3} + \frac{2}{3}\right\} \div \left\{\frac{3+4+6}{4+5+7} + \frac{2}{5} \cdot \frac{5}{3}\right\}$ (3)

Section D

Q.17 The angles P, Q, R and S of a quadrilateral PQRS are in the ratio 1 : 3 : 7 : 9. (4)

(i) Find the measure of each angle.

(ii) Is PQRS a trapezium? Why?

(iii) Is PQRS a parallelogram? Why?

Q.18 Ram Prasad has a narrow rectangular plot in his village. The length and breadth of the plot are in the ratio 11 : 4. He donates the plot to the Gram Panchayat for a school. If at the rate of Rs. 100 per meter it will cost the village panchayat Rs 75000 to fence the plot. What are the dimensions of the plot. What are the values exhibited by Ram Prasad. (4)

Q.19 On a particular day, the sales (in rupees) of different items of a baker's shop are given below :

Item	Sale
Ordinary Bread	160
Cakes and Pastries	40
Biscuits	80
Fruit Bread	60
Others	20
Total	360

Draw a pie chart for this data. (4)

Q.20 The volume of a cubical box is 91125 cm^3 . Find the length of a side of the box. What will be the area of each face of the cube. Find the volume of the cube if each side is doubled. (4)