



INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS
Mathematics –Class VIII



Sample paper 2

Max marks :80

General instructions ;

Time :3 hours

- (i) All questions are compulsory.
- (ii) Calculations should be shown in a working column on the right hand side.
- (iii) Section A: Questions 1- 6 carry 1 mark each.
Section B: Questions 7-12 carry 2 marks each.
Section C: Questions 13-22 carry 3 marks each.
Section D: Question 23-30 carries 4 marks.

Section – A

- 1. Name the quadrilateral having one pair of opposite sides parallel. 1
- 2. What is the sum of a number and its additive inverse? 1
- 3. Find the solution of the equation $\frac{y}{5} = -3$ 1
- 4. Write the lower limit of the class interval 20-30 1
- 5. Name the property used in the following 1
 - a) $\frac{2}{9} \times \frac{-3}{7} = \frac{-3}{7} \times \frac{2}{9}$
 - b) $\frac{5}{1} + 0 = \frac{5}{1}$
- 6. The measure of an angle of a parallelogram is 122. Find the measure of its adjacent angle 1

SECTION -B

- 7. Find $\frac{2}{5} + \frac{-3}{7} \times \frac{3}{5}$ 2
- 8. Find the sum of the interior angles of a regular polygon of side 12 2
- 9. Solve $4(x-3)-5=0$ 2
- 10. There are 12 blue balls and 15 red balls in a basket. When a ball is drawn at random, find the probability that 2
 - a) It is a blue ball
 - b) It is not a blue ball.

11 The sum of two rational numbers is $\frac{-1}{9}$. If one of the numbers is $\frac{7}{3}$, find the other. 2

12 Two angles of a quadrilateral are of measure 50, and the other two angles are equal. What is the measure of each these two angles. 2

SECTION -C

13 Construct a rhombus of diagonals 5.6 cm and 6.4 cm 3

14 Find the cube root of 2744 3

15 Solve $\frac{t-8}{2} = t+5$ 3

16 If the measure of each exterior angle of a regular polygon is 18° , find the number of sides of polygon. Also find the sum of all interior angles 3

17 Find the least number to be added to 594 to get a perfect square. Also find the square root of the number so obtained. 3

18 The denominator of a fraction is 3 more than its numerator. If 5 is added to numerator and denominator the resulting fraction is equivalent to $\frac{4}{5}$. Find the fraction 3

19 Find square root of 27.04 3

20 A card is chosen at random from a deck of playing cards. what is the probability that 3

- a) a king is chosen
- b) a diamond is chosen
- c) a black 4 is chosen

21 A frequency distribution table on the number of employees and their salary is as given below 3

Salary (in thousands)	15-20	20-25	25-30	30-35	35-40
No. of employees	35	30	40	45	10

Study the table and answer the following

- a) in which salary group the number of employees is maximum
- b) how many employees are getting a salary below 30 thousand
- c) What is the class size of each class interval?

22 Find the angles of a parallelogram if one angle is 20 less than twice the smallest angle, 3

SECTION- D

23 Students of our school decided to plant 6412 plants in such a way that number of rows and number of columns remain same.
 a) Find the number of plants left out in this arrangement.
 b) Find the number of plants in each row.
 Which value of the students is depicted by the above? 4

24 Find the smallest number by which 6750 is to be divided to obtain a perfect cube. Also find the cube root of the number so obtained. 4

25 The runs scored by a player in 30 matches are as follows
 38,42,40,35,72,37,57,62,59,80
 84,73,65,40,38,60,58,38,54,39
 50,44,71,83,45,38,80,77,76,40 4

Construct a frequency table with a class interval 30-40

Represent the frequency table using a histogram

26 Solve 4

$$\frac{2y}{3} + \frac{y}{4} + 3 = \frac{3y}{2}$$

27 A survey was made to find the customer satisfaction by a car company. Adjoining pie chart shows the findings of this survey. 4



From this pie chart answer the following:

- (i) If 2700 people were very satisfied, how many people in total were surveyed?
- (ii) Find the number of people who were very dissatisfied somewhat dissatisfied.

- 28 Construct a Quadrilateral ABCD in which $AB = 4\text{cm}$, $BC = 5\text{cm}$, $\angle A = 70^\circ$ $\angle B = 120^\circ$, $\angle C = 100^\circ$ 4
- 29 The sum of the ages of a father and his son is 72 years. After 2 years, father will be 4 years less than 3 times the age of his son. Find their present ages. 4
- 30 Find the perimeter of a square whose area is 6889 square units. 4