

Question Paper SA-I

2013-2014

CBSE Class VIII Mathematics

General Instruction:

- All the questions are compulsory.
- The Question Paper consists of 26 Questions divided into four sections A, B, C and D.
- Section-A comprises of 8 questions of one mark each.
- Section-B consists of 6 questions of two marks each.
- Section-C comprises of 8 questions of three marks each.
- Section-D comprises of 4 questions of four marks each.
- There is no overall choice. However, an internal choice has been provided in 4 questions of four marks each and 2 questions of six marks each. You have to attempt only one of the alternatives in all such questions.
- The use of calculator is not permitted.

Section – A

1. The multiplicative inverse of 0.9 is

- a) $\frac{5}{9}$
- b) $\frac{10}{9}$
- c) $\frac{8}{9}$
- d) $\frac{9}{10}$

2. How many rational numbers exist between -2 and 1?

- a) 1

b) 2

c) 3

d) Infinite

3. Which of the following is the solution of $2x^2 - 3x + 2 = 0$?

a) $x=4$

b) $x=5$

c) $x=7$

d) $x=-2$

4. Which of the following is an example of regular polygon?

a) Rhombus

b) Kite

c) Square

d) Rectangle

5. In the class interval 35-45, 45 is called

a) Upper limit

b) Lower limit

c) Range

d) Frequency

6. The units digit of the square of 327 will be

a) 7

b) 1

c) 4

d) 9

7. By which digit the cube of 27 ends?

a) 1

b) 2

c) 3

d) 4

8. When 35% is expressed as fraction, we get

a) $\frac{7}{20}$

b) $\frac{5}{17}$

c) 2.5

d) 35

Section – B

9. Find the square of

a) 32

b) 46

10. Simplify: $-2\frac{2}{3} \times 1\frac{1}{4}$

11. Find the cube root of 64 and 512.

12. Find the value of x if 20% of x is 40.

13. Sum of two numbers is 95. If one exceeds the other by 15, find the numbers.
14. How many sides does a regular polygon have if the measure of each of its interior angle is 165° ?

Section – C

15. Construct the quadrilateral “DEAR” with $DE=4$ cm, $EA=5$ cm, $AR=4.5$ cm,

$$\angle E = 60^\circ \text{ and } \angle A = 90^\circ$$

OR

Construct a rhombus whose diagonals are 5.2 cm and 6.4 cm long.

16. A table marked at Rs 15,000 is available for Rs 14,400. Find the discount given and the discount percent.

17. Simplify and Solve $15(y - 4) - 2(y - 9) + 5(y + 6) = 0$

OR

Solve: $\frac{7y+4}{y+2} - \frac{-4}{3}$

18. Find ten rational numbers between $\frac{3}{5}$ and $\frac{3}{4}$

19. The angles of a quadrilateral are in the ration 3:5:7:9. Find the angles of the quadrilateral.

20. Numbers 1 to 10 are written on ten separate slips (one number on one slip), kept in a box and mixed well. One slip is chosen from the box without looking into it. What is the probability of

- a) Getting a number less than 6?
- b) Getting a number greater than 6?
- c) Getting a one digit number?

21. Find the square root of 100 by the method of repeated subtraction.

22. Find the smallest number by which 256 must be multiplied to obtain a perfect cube.

Section – D

23. The cost of an article was Rs 15,500. Rs 450 were spent on its repairs. If it is sold at a profit of 15%, find the selling price of the article.

OR

Arun bought a pair of skates of a sale where the discount given was 20%. If the amount he pays is Rs 1,600, find the marked prices.

24. Draw a pie chart of the data given below.

The time spent by a child during a day:-

Sleep	8 hours
School	6 hours
Homework	4 hours
Play	4 hours
Others	2 hours

25. Aman's age is three times his son's age. Ten years ago he was five times his son's age. Find their present ages.

26. The weekly wages (in Rs.) of 30 workers in a factory are.

830, 835, 890, 810, 835, 836, 869, 845,

898, 890, 820, 860, 832, 833, 855, 845,

804, 808, 812, 840, 885, 835, 835, 836,

878, 840, 868, 890, 806, 840

Using tally marks make a frequency table with intervals as 800-810, 810-820 and so on. Also,

draw a histogram for this data