

Std. VII Section : _____

Subject : Maths

Marks : 80

Date : _____

Term-I

Time : 3 Hrs.

Name : _____ Roll No. _____

General Instructions :

- 1) The question paper contains 38 questions divided into five sections A, B, C, D & E.
- 2) Question no. 1 to 20 in Section A carries one mark each.
- 3) Question no. 21 to 25 in Section B carries two marks each.
- 4) Question no. 26 to 31 in Section C carries three marks each.
- 5) Question no. 32 to 35 in Section D carries five marks each.
- 6) Question no. 36 to 38 in Section E carries four marks each.
- 7) All questions are compulsory.

Section A (each carries 1 mark)**20M**

- Q. 1 : The value of $(-6) + 9$ is _____.
a) -15 b) 3 c) -3 d) 15
- Q. 2 : The reciprocal of $\frac{3}{5}$ is _____.
a) $\frac{5}{3}$ b) $-\frac{3}{5}$ c) $\frac{3}{5}$ d) 1
- Q. 3 : The decimal form of $\frac{3}{10}$ is _____.
a) 0.03 b) 3.0 c) 0.3 d) 0.333
- Q. 4 : _____ is a rational number.
a) $\sqrt{2}$ b) $\frac{2}{5}$ c) 3.14159 d) π
- Q. 5 : The value of 5^0 is _____.
a) 0 b) 1 c) 5 d) not defined
- Q. 6 : _____ triangle has all sides equal.
a) Scalene b) Isosceles c) Right-angled d) Equilateral
- Q. 7 : _____ has only one line of symmetry.
a) Square b) Circle c) Isosceles triangle d) Rectangle
- Q. 8 : The additive inverse of 11 is _____.
a) 0 b) -11 c) 11 d) 1
- Q. 9 : 0.75 expressed as a fraction is _____.
a) $\frac{1}{4}$ b) $\frac{3}{4}$ c) $\frac{4}{5}$ d) $\frac{2}{3}$

Q. 10 : Decimal form of $\frac{25}{4} =$ _____.

- a) 2.65 b) 6.52 c) 6.25 d) 2.56

Q.11 : The rational number $\frac{42}{63}$ in standard form _____.

- a) $\frac{6}{9}$ b) $\frac{9}{6}$ c) $\frac{2}{3}$ d) $\frac{3}{2}$

Q. 12 : The value of $5^0 - 6^0 + 8^0 =$ _____.

- a) 7 b) -7 c) 1 d) 2

Q. 13 : The angles of an equilateral triangle are _____.

- a) $60^\circ, 60^\circ, 60^\circ$ b) $90^\circ, 45^\circ, 45^\circ$ c) $30^\circ, 60^\circ, 90^\circ$ d) $100^\circ, 40^\circ, 40^\circ$

Q. 14 : A circle has _____ line(s) of symmetry.

- a) no b) one c) infinite d) two

Q. 15 : _____ is an integer.

- a) $\frac{1}{2}$ b) -4 c) 0.3 d) $\sqrt{3}$

Q. 16 : The decimal fraction is _____.

- a) $\frac{2}{4}$ b) $\frac{3}{5}$ c) $\frac{7}{10}$ d) $\frac{9}{8}$

Q. 17 : Rational number between $\frac{1}{2}$ and $\frac{3}{4}$ is _____.

- a) $\frac{1}{3}$ b) $\frac{2}{13}$ c) $\frac{4}{5}$ d) $\frac{2}{3}$

Q. 18 : $0.57 \times 1000 =$ _____.

- a) 5.7 b) 57 c) 570 d) 5700

Q. 19 : Assertion (A) : The number $\frac{4}{0}$ is a rational number.

Reasons (R) : Any number divided by zero is not defined.

- a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true and R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.

Q. 20 : Assertion (A) : $\frac{3}{6}$ and $\frac{1}{2}$ are equivalent fractions.

Reasons (R) : Multiplying or dividing the numerator and denominator of a fraction by a same number gives an equivalent fraction.

- a) Both A and R are correct and R is the correct explanation for A.
b) Both A and R are correct but R is not the correct explanation for A.
c) A is true but the R is false.
d) Both A and R are false.

Section B (each carries 2 marks)**10M**Q.21 : Evaluate : i) $(-15) + 7$ ii) $|-13| + |-2|$ Q.22 : Find; $\frac{3}{4}$ of 200ii) $\frac{1}{2}$ of 110

Q.23 : Write the following decimals in the expanded form : i) 5.23 ii) 16.984

Q.24 **A)** Compare the following rational numbers : $<$, $>$, $=$ i) $\frac{8}{9}$ and $\frac{10}{11}$ ii) $\frac{-2}{7}$ and $\frac{3}{-14}$ **OR**Q.24 **B)** Find the additive inverse of the following rational numbers ...a) $\frac{-25}{37}$ b) $\frac{82}{39}$ Q.25 **A)** Write the following in exponential (power) form :i) $6 \times 6 \times 6 \times 6$ ii) $\frac{-3}{4} \times \frac{-3}{4} \times \frac{-3}{4} \times \frac{-3}{4} \times \frac{-3}{4}$ **OR**Q.25 **B)** Simplify and write in exponential form a) $6^3 \times 6^0 \times 6^1$ b) $\left(\frac{15}{19}\right)^9 \times \left(\frac{15}{19}\right)^{-9}$ **Section C (each carries 3 marks)****18M**

Q.26 : Arrange the following in descending order :

i) -4, 3, -7, 2, 0

ii) -12, 8, -6, -3, 5

Q.27 : Multiply the following : i) $\frac{9}{5} \times 45$ ii) $\frac{6}{7} \times 42$ iii) $\frac{4}{5} \times 50$ Q.28 **A)** The weight of Sneha and Aditya is 90.5 kg. If the weight of Aditya is 48.26kg. Find the weight of Sneha.**OR**Q.28 **B)** Find the quotient a) $35.64 \div 10$ b) $209.793 \div 100$ c) $1331.2 \div 1000$ Q.29 : **A)** Simplify : $\frac{13}{18} + \left(\frac{-11}{9}\right) + \frac{7}{3}$ **OR****B)** Verify the property : $\left(\frac{p}{q} + \frac{r}{s}\right) = \left(\frac{r}{s} + \frac{p}{q}\right)$ for $\frac{-3}{5}$, $\frac{2}{15}$ Q.30 : Simplify the following : $3^4 \times 2^5 \times \frac{1}{6^5}$ Q.31 : In right angled triangle $AB = 5$ cm, $BC = 12$ cm. Find the hypotenuse AC.

Section D (Each carries 5 marks)**20M**

Q.32 **A)** i) Evaluate : $(-36 + 4) \div (7 + 1)$

ii) The temperature of a particular place at noon on a winter day was 5°C . At midnight, the temperature had dropped by 12°C . What was the temperature at midnight?

OR

Q.32 **B)** Solve : i) $7 + (-6)$

ii) $(-42) - 16$

iii) $(-16) \times 1$

iv) $(-8) \div 4$

v) $0 \div (-12)$

Q.33 : Multiply :

i) $0.8 \times 3.5 \times 0.9$

ii) $79.77 \times 4.2 \times 5.1$

Q.34 **A)** Find the value of : i) $\left(\frac{2}{5}\right)^5$

ii) $\left(\frac{-7}{9}\right)^3$

iii) $\left(\frac{-1}{2}\right)^2$

OR

Q.34 **B)** Find x so that

a) $\left(\frac{2}{5}\right)^{3x} \times \left(\frac{2}{5}\right)^4 = \left(\frac{2}{5}\right)^7$

b) $\left(\frac{7}{8}\right)^{5x+3} \times \left(\frac{7}{8}\right)^{-4} = \left(\frac{7}{8}\right)^9$

Q.35 : The ratio of three angles of a triangle is 2:3:5

a) Find the measure of each angle.

b) Mention the special name of the triangle.

Section E (each carries 4 marks)**12M**

Q.36 : **Case study 1:**

Ramesh had a chocolate bar. Which he divided into 8 equal pieces.

He ate 3 pieces and gave 2 pieces to his sister.

Study the above information and answer the following questions.

i) How many pieces did Ramesh eat?

1M

a) 2

b) 4

c) 3

d) 1

ii) How many pieces were given to his sister?

1M

a) 1

b) 2

c) 3

d) 4

iii) a) What fraction of the chocolate did Ramesh eat?

2M

a) $\frac{3}{8}$

b) $\frac{1}{2}$

c) $\frac{1}{4}$

d) $\frac{5}{8}$

OR

b) What fraction of the chocolate is still left?

a) $\frac{2}{8}$

b) $\frac{5}{8}$

c) $\frac{4}{8}$

d) $\frac{3}{8}$

Q.37 : Case study 2 :

Four students wrote rational numbers on the board.

$$\text{Priya} = \frac{-1}{2}, \text{Aman} = \frac{3}{4}, \text{Kunal} = \frac{0}{5}, \text{Meena} = \frac{-3}{5}$$

Read the above information and answer the following :

i) Who wrote a negative rational number? 1M

- a) Aman b) Kunal c) Kunal & Meena d) Meena & Priya

ii) Who wrote a number equal to zero? 1M

- a) Priya b) Aman c) Kunal d) Meena

iii) Who wrote the greatest number? 2M

- a) Priya b) Aman c) Kunal d) Meena

OR

b) Who wrote the smallest number?

- a) Meena b) Kunal c) Aman d) Priya

Q.38 : Case study 3 : In Class VII, the teacher

Shows a rectangle, triangle, and circle, asking students to find their line (s) of symmetry.

i. How many lines of symmetry does a rectangle have? 1M

- a) 1 b) 2 c) 3 d) 4

ii. Which shape has infinite lines of symmetry? 1M

- a) Triangle b) Square c) Circle d) Rectangle

iii. a) An equilateral triangle has how many lines of symmetry? 2M

- a) 2 b) 1 c) 3 d) 0

OR

b) Which shape has only one line of symmetry?

- a) Isosceles triangle b) Circle c) Rectangle d) Square
