JB Academy, Ayodhya

Review Test

Class – VII, Sub: Mathematics

Name : ..... **Section/ Roll No.....**

Max Marks: 50 **Duration: 2 hrs.**

Section A : Mental Math(1X 10 = 10 marks)

1. What percent of 1 day is 36 minutes?

a) 2.5 %. b) 20% c) 3.5% d) 0.25%

2. If CP of a bag is ₹160 and it is sold at ₹200. Profit percent is

a) 20% b) 18% c) 25% d) 22%

3. The reciprocal of $3\frac{2}{3}$ *is*

a) $\mathbf{3\frac{3}{2}}$ $\boldsymbol{b)}$ $\mathbf{\frac{11}{3}}$ $\boldsymbol{c)}$ $\mathbf{2\frac{3}{5}}$ $\boldsymbol{d)}$ $\mathbf{\frac{3}{11}}$

4. The standard form of $\frac{-48}{60}$ is

a) $\mathbf{\frac{48}{60}}$ $\boldsymbol{b)}$ $\mathbf{\frac{-60}{48}}$ $\boldsymbol{c)}$ $\mathbf{\frac{-4}{5}}$ $\boldsymbol{d)}$ $\mathbf{\frac{-4}{-5}}$

5. Sides of a triangle are (x+1) cm, (x-1) cm, (2x+2) cm. The perimeter of the triangle is

a) 2x cm b) 4x cm c) 4x+2 cm d) X cm

6. The circumference of a circle of diameter 7cm is

a) 14π cm b) 7π cm c) 7 cm d) 14 cm

7. $(5+7)^0$ is equal to

a) 12 b) 0 c) 1 d) None of the above

8. The exponential form of 125 is

a) 25^2 b) 5^3 c) 5^4 d) 5^0

9. Subtract 3ab from 8ab

a) 9ab b) $9a^2b^2$ c) 13ab d) 5ab

10. Which of the following is NOT a binomial

a) 3x-7 b) $\frac{2}{7}ab - bc + 1$ $c)$ $-7xy^2 + 2p$ d) b + c

Section – B : Calculation Based(2 x 10 = 20 Marks)

11. (a) Find 30% of ₹180.

(b) 75%of 400 L

12. P = ₹800, R =18% p.a. T = 3 years. Find SI and amount.

13. Do as directed:

(a) Divide $\frac{6}{7}$ by $-\frac{3}{14}$

(b) Solve $\frac{18}{45} \times -\frac{25}{36}$

14. Do as directed:

(a) Simplify $\frac{55}{18} + \frac{33}{9} - \frac{17}{18}$

(b) Arrange in ascending order

$$-\frac{5}{3}, -\frac{13}{15}, -\frac{2}{5}$$

15. Find the radius of circle whose circumference is 396 cm.

16. Find the area of shaded region

17. Find the sum of $4x^2 - 5xy + 3y^{2,}$
$-6x^2 - 4xy + 2y^2$ and $-2xy - 4y^2 - 3x^2$.

18. Find the value of the following expression:
(a) $3x^2y + 5xy^2 + 2xy$ at $x=2$ and $y = 1$

(b) $x^2 + y^2$ at x = -2, y=-1

19. Express in exponential form:

a) $\frac{400}{441}$

b) 125× 64

20. Simplify using laws of exponents :

a) $\frac{2 \text{ X } 3 \text{ X } 8}{2+3+4}$

b) $\{(\frac{3}{5})\}$

Section – B : Application Based (4 x 5 = 20 Marks)

21. Rajesh purchased a house for ₹ 45200 and spent ₹ 2800 on it's repair. He had to sell it for ₹ 46800. Find his loss and loss percent.

OR

Ravi borrowed ₹25000 for 4 years at 9% p.a. He cleared his debt by paying ₹30000 and a cycle. Find the cost of the cycle.

22. Match the column:

A	B
$\left[\frac{2}{3}\right] X \left[\frac{3}{2}\right]$	1

$(3^0 + 4^{0)} X\ 2$	-1
$(-1)^{125}$	4
$(-13)^0$	$\frac{4}{9}$

OR

Simplify: $\frac{2\ X\ 3\ X\ 2}{9\ X\ 4}$

23. The radius of a wheel of a car is 21 cm. How many times will it revolve to travel a distance of 66 km?

OR

A rectangular field is 20 m long and 16m broad. A path of 2m width is constructed inside andall around the park. Find the area of the path and cost of paving the path at the rate of ₹ 20/m^2.

24. What should be added to a^2+ 2ab + b^2 to find 4ab + b^2?

OR

Write the expression for the following:

(a) 12 less than twice of x.
(b) 2 more than twice of m.
(c) 5 less than thrice of n.
(d) 5 times t added to 6 times p.

25. The cost of $7\frac{2}{3} m\ of\ cable\ is \frac{₹368}{3}$. $Find\ the\ cost\ of\ 1\ m\ of\ wire.$

OR

In a super market the cost of a table lamp is ₹ 920 on which 1/5 th is off. The same table lamp is available at an electric shop for ₹ 860 with 1/10 th off. From where should one buy the lamp?