36. Simplify $\frac{25xt^{-4}}{5^{-3}x10xt^{-8}}$

Or

Simplify $(2x+5)^2 - (2x-5)^2$

37. Draw the graph for the following table of values cost of apples

Number of apples	1	2	3	4	5
Cost in (Rs.)	5	10	15	20	25

38. Find compound Interest on Rs. 12600 for 2 year at 10% per annum compounded annually.

39. A scooter was bought at Rs. 42,000. Its value depreciated at the rate of 8% per annum. Find its value after one year.

40. A suitcase with measures 80cm x 48cm x 24cm is to be covered with a tarpaulin cloth. How many metres of tarpaulin of width 96cm is required to cover 100 such suitcases?

Or

A loaded truck travels 14 km in 25 minutes. If the speed remains the same, how far can it travel in 5 hours?

Maitri Vidya Niketan, E.M.S.S.S, Risali, Bhilai
Annual Examination – (2022-23)
Class – VIII Subject - Mathematics

TIME – 3Hrs **MM-80**

General Instructions-
1. All questions are compulsory.
2. The question paper consists of 40 questions divided into four sections – A,B,C,D.
3. Section A contains 20questions of 1 mark each which are multiple choice questions, fill in the blanks and short questions, SectionB contains 6 questions of 2 marks each, Section Ccontains 8 questions of 3 marks each, Section D contains 6 questions of 4 marks each.

SECTION-A

Each question carry 1 mark-

Multiple Choice Questions:-

1. The price which is printed on an item is called`_____.
(a) Cost Price (b)Selling Price (c)Marked Price (d) Discount

2. Adjacent angles of a parallelogram are_____.
(a) Equal (b) Complementary (c) Supplementary (d)None

3. The volume of a cylinder whose diameter is equal to its height is_____.
(a) πr^2h (b) $2\pi rh$ (c) $2\pi r(r+h)$ (d) $2\pi r^3$

4. $x^a \div x^b$ =_____.
(a) x^{a+b} (b) x^{a-b} (c) $ax+bx$ (d) 1

5. The multiplicative inverse of $\left(\frac{2}{3}\right)^{-3}$ is_____
(a) $\left(\frac{8}{27}\right)$ (b) $\frac{27}{8}$ (c) $\frac{(-8)}{27}$ (d) $\frac{(-27)}{8}$

6.The coefficient of x in $(-8xy^2)$ is _____.
(a) 8 (b) $(-8y^2)$ (c) $8y^2$ (d) -8

7. A regular polygon is_____.
(a) Equilateral (b) Equiangular (c) a and b both (d) None

8.The Diagonals of a _____ are equal and bisect each other at right angle.
(a Square (b) Trapezium (c) Parallelogram (d) None

9. $1m^3$ = _____ litres.
(a) 10 (b) 100 (c) 1000 (d) 10000

10.The sum of areas of all faces (excluding top and bottom) of a cuboid is the _____ of the cuboid.
(a) Volume (b) Total surfaces area (c) Lateral surface area (d) none

I(B) Fill in the blanks:-

11. The formula for calculating Amount = _____.
12. The deduction made on the marked price is called_____
13. The value of $61^2 - 59^2$ is_____.
14. The value for a^0 is_____.
15. Complete the identity $(x + a)(x + b) =$_____.

I (C) Solve the following:-

16. Obtain the product xy, yz, zx.
17. Express 0.000035 in standard form.
18. Evaluate $\left(\frac{1}{2}\right)^{-5}$
19. Identify the terms of the expression $1+x+x^2$
20. Find the ratio of 5m to 50km.

SECTION-B

Each question carries 2 marks-

21. 72% of 25 students are good in mathematics. How many not are good in mathematics?

22. Add the following
ab-bc, bc-ca, ca-ab.

23. Simplify
$3x(4x - 5) + 3$
Or
Multiply the binomials
$(2x + 5)$ and $(4x - 3)$

24. The diagonals of a rhombus are 7.5cm and 12 cm. find its area.

25. Find the value of
$(3^0+4^{-1}) \times 2^2$

26. Evalvate 99^2

SECTION-C

Each question carries 3 marks-

27. Show that:
(a-b) (a+b)+ (b-c) (b+c) + (c-a) (c+a) =0

28. Subtract 4a-7ab+3b+12 from 12a-9ab+5b-3
Or
Simplify (a+b+c) (a+b-c)

29. A man got 10% increase in his salary. If his new salary is Rs 1,54,000. Find his original salary.

30. The shape of the top surface of the table is a trapezium. Find its area if its parallel sides are 1m and 1.2m and perpendicular distance them is 0.8m.

31. A machine in a soft drink factory fills 840 bottles in six hours. How many bottles will it fills in five hours?

32. Simplify $a(a^2+a+1)+5$ and find its value for
(1) a=0 and (2) a=1.
Or
An item marked at Rs. 840 is sold for Rs. 714. What is the discount and discount %?

33. A flooring tile has the shape of a parallelogram whose base is 24cm and corresponding height is 10cm. How many such tiles are required to cover a floor of area $1080m^2$?

34. 6 pipes are required to fill a tank in 1 hour 20 minutes. How long will it take if only 5 pipes of same type are used?

SECTION-D

Each question carries 4 marks-

35. In a stack there are 5 books each of thickness 20mm and 5 paper sheets each of thickness 0.016mm. What is the total thickness of the stack?