

GRAND TEST

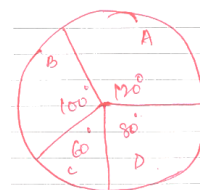
GENERAL INSTRUCTIONS :

- All questions compulsory.
- The question paper consists of **36 questions** divided into three sections A, B, C and D.
 - Section A comprises of **10 questions** of **1 mark** each.
 - Section B comprises of **12 questions** of **1 marks** each.
 - Section C comprises of **8 questions** of **2 marks** each.
 - Section D comprises of **6 questions** of **3, 4 marks** each.
- Time allotted is **2 hours**. The **Maximum Marks** are **60**.

SECTION – A (1 × 10 = 10)

M.M : 60

1. If $2^{x+5} = 4^{x-1}$, then x is equal to
 (a) 6 (b) 7 (c) 4 (d) $\frac{3}{2}$
2. If $x - y = 7$ and $xy = 9$, then $x^2 + y^2$ is equal to
 (a) 67 (b) 54 (c) 58 (d) 31
3. 31y 6 is a no which is divisible by 3 where y is the smallest digit. There y is equal to
 (a) 6 (b) 0 (c) 2 (d) 1
4. A polyhedron has 30 edges and 20 vertices. The number of faces are.
 (a) 12 (b) 14 (c) 15 (d) 6
5. If 8 is added to 4 times the number, the result is two less than 5 times the no. The number is
 (a) 6 (b) 5 (c) 8 (d) 4
6. If 16 kg of rice costs Rs 1120, the cost of 19 kg of rice will be
 (a) 1440 (b) 1340 (c) 1330 (d) 1230
7. Two diagonals of a rectangle are of length. $(4x + 1)$ cm and $(2x + 15)$ cm, there the value of x is
 (a) 10 (b) 7 (c) 9 (d) 12
8. Volume of cube is 125 cm^3 , its TSA is
 (a) 120 cm^2 (b) 175 cm^2 (c) 150 cm^2 (d) 100 cm^2
9. In the adjacent fig, what % of the circle is occupied by sector c'.



- (a) $33\frac{1}{3}\%$ (b) $22\frac{2}{9}\%$ (c) $16\frac{2}{3}\%$ (d) $27\frac{7}{9}\%$
10. The graph $y = - 3$ is
 (a) y – axis (b) x – axis
 (c) a line parallel to y – axis (d) a line parallel to x – axis

26. Interest on deposits for a year.

Deposit (in Rs)	1000	2000	3000	4000	5000
Simple Interest (in Rs)	80	160	240	320	400

- (i) Does the graph pass through the origin?
- (ii) Use the graph to find the interest on Rs 2500 for a year
- (iii) To get an interest of Rs 280 per year, how much money should be deposited?

27. On a particular day, the sales (in rupees) of different items of a baker’s shop are give below.

Ordinary bread :	320
Fruit bread:	80
Cakes and pastries:	160
Biscuits:	120
<u>Other:</u>	<u>40</u>
Total :	720

28. Find the amount and the compound interest on Rs 10,000 for $1\frac{1}{2}$ years at 10% per annum, compounded half yearly. Would this interest be more than the interest he would get if it was compounded annually?

SECTION – D (4 × 5= 20)

- 29. Diagram of the adjacent picture frame has outer dimensions = 24 cm × 28 cm and inner dimensions 16 cm × 20 cm. Find the area of each section of the frame, if the width of each section is same.
- 30. The lateral surface are of a hollow cylinder is 4224 cm². It is cut along its height and formed a rectangular sheet of width 33 cm. Find the perimeter of rectangular sheet?
- 31. Find CI paid when a sum of Rs 10, 000 is invested for 1 year and 3 months at $8\frac{1}{2}$ % per annum compounded the time in years.
- 32. Number 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.
 - (i) getting a number 6?
 - (ii) getting a number less than 6?
 - (iii) getting a number greater than 6?
 - (iv) getting at 1-digit number?
- 33. A godown is in the form of a cuboid of measure 60 m × 40 m × 30 m. How many cuboidal boxes can be stored in it if the volume of one box is 0.8 m³?