No. of Printed Pages: 4

(FIRST SHIFT)

DC-I/I-300

SUMMATIVE ASSESSMENT-II, 2011-12

Sub.: Mathematics

Time: 2-30 hrs.]

Class - VIII

M. M. 60

Note: (1) All questions are compulsory.

- (2) This question paper consists of 26 questions divided into four sections A, B, C and D.
- (3) Section A contains 8 questions of 1 mark each Section—B contain 6 questions of 2 marks each, Section—C contains 8 questions of 3 marks each and Section—D contains 4 questions of 4 marks each.
- (4) Use of calculators is not permission.

[Section-A]

Multiple Choice Questions:

 $1\times8=8$

- 1. Which one is binomial:
 - (a) 4l + 5m

Chr 2x

(c) $3x^2 - 5x + 2$

- (d) $4 + \frac{3}{x}$
- 2. The relation between F, V and E are represented by Euler's formula as follows:
 - (a) F V + E = 0

(b) F + E + V = 1

(c) F + V - E = 2

- (d) F V + E = 2
- 3. What is the multiplicative inverse of 3^{-1} :
 - (a) $\frac{1}{3^7}$

(b) 3^7

(c) 0

- (d) = 2
- 4. Which of the following number is divisible of 34:
 - (a) 295

(b) 432

616

(d) 1091

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(P. T. O.)

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- 5. The perimeter of a square is 4 m. Its area is given by:
 - (a) 1 m^2

(b) 2 m^2

(c) 4 m^2

- (d) 4 m^3
- 6. The value of $(5^{\circ} + 7^{-1}) \times 7$ is:
 - <u>(a)</u> 84

(b) 36

(c) 8

- (d) 35
- 7. What is the product of 4 and 0:
 - (a) 4

(b) 0

(c) 2

- (d) 1
- 8. $(a^2 2ab + b^2)$ is equal to:
 - (a) $(a + b)^2$

(b) $(a - b)^2$

(a) $a^2 - b^2$

(d) $a^2 + b^2$

Section-B

9. Find the value of m so that:

 $2 \times 6 = 12$

$$3^{m+1} \times 3^5 = 3^7$$

19. Plot the following points on a graph paper sheet:

A(1, 3), B(1, 2), C(4, 3), D(6, 2)

- 11. A shirt is marked at Rs. 850 and sold it for Rs. 765. What is the discount and discount percentage.
- K. Find the value using suitable identity:

$$97 \times 103$$

13. Find the common factors of the given terms:

12 x, 36

14 Simplify:

$$(a+b)+(b-a)+(c-b)$$

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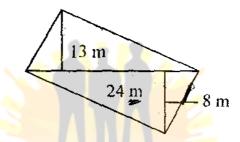
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[Section-C]

 $3 \times 8 = 24$

- Find the compound interest on Rs. 5000 for 2 years at the rate of 10% per annum compounded annually. —
- 16. Subtract $5x^2 4y^2 + 6y 3$ from $7x^2 4xy + 8y^2 + 5x 3y$.
- The diagonal of a quadrilateral shaped field is 24 m and the perpendicular dropped on it from the remaining opposite vertices are 8 m and 13 m. Find the area of the field.



- 18. A machine in a soft drink factory fills 840 bottles in hours. How many bottles will it fill in 5 hours.
- 19/ Divide:

$$(7x^2 + 14x)$$
 by $(x + 2)$

- 29. A godown is in the form of a cuboid of measures $60 \text{ m} \times 40 \text{ m} \times 30 \text{ m}$. How many cuboidal boxes can be stored in it, if the volume of one box is 0.8 m^3 .
- 21. Show that:

$$(3x+7)^2 - 84x = (3x-7)^2$$

[Section-D]

 $4 \times 4 = 16$

23. Factorise: (Any two)

(a)
$$a^2 - 2ab + b^2 - c^2$$

(b)
$$p^2 + 6p + 8$$

$$(c)$$
 $x^8 + \overline{y}^8$

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- A rectangular paper of width 15 cm is rolled along its width and a cylinder of radius 20 cm is formed. Find the volume of the cylinder. (Take $\pi = \frac{22}{7}$)
- There are 100 students in a Hostel. Food provision for themis for 20 days. How long will these provision last, if 25 more students join the group.
- 26, Draw a graph for following data:

Sides of square (in cm)	2	3	4	5	6
Area (in cm ²)	4	9	16	25	36

Is it a linear graph?



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