

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 :

1×8=8

1. Which one is binomial :

(a) $4l + 5m$

~~(b)~~ $2x$

(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^{-7} :

~~(a)~~ $\frac{1}{3^7}$

(b) 3^7

(c) 0

(d) 2

4. Which of the following number is divisible of ~~34~~ 34 :

(a) 295

(b) 432

~~(c)~~ 616

(d) 1091

(2)

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 $(5^0 + 7^{-1}) \times 7$ is :

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

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

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

[Section-B]

9. Find the value of m so that :

$2 \times 6 = 12$

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

10. 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.

12. Find the value using suitable identity :

97×103

13. Find the common factors of the given terms :

12 x, 36

14. Simplify :

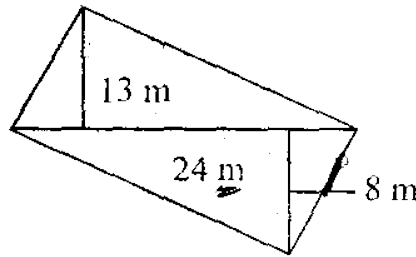
$(a + b) + (b - a) + (c - b)$

(3)

[Section-C]

3×8=24

- 15/ 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 $7x^2 - 4xy + 8y^2 + 5x - 3y$.
- 17/ 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 6 hours. How many bottles will it fill in 5 hours.

- 19/ Divide :

$$(7x^2 + 14x) \text{ by } (x + 2)$$

- 20/ A godown is in the form of a cuboid of measures 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.

- 21/ Show that :

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

- 22/ If any object has 20 faces, 12 vertices then find the value of Edges by using Euler's formula.

[Section-D]

4×4=16

23. Factorise : (Any two)

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

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

(c) $x^8 + y^8$

(4)

24 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 $\pi = \frac{22}{7}$)

25 There are 100 students in a Hostel. Food provision for them is 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 ?