Late B. I. Chanshetti Guruji Pratishthan's

GLOBAL VILLAGE PUBLIC SCHOOL

Near Primari Health Center, N. H. 09, Boramani, Tal. South Solapur, Dist. Solapur

Semester I- 2019-2020

Class :- VIII **Subject – MATHEMATICS** **Date :-14 /10 /2019**

Max. Marks :80 **Time – 3 hrs**

SECTION –A

Q.1 Attempt the following. **(1*6 = 6 M)**

1. Which one is binomial

   a. 4l + 5m b. 2x c. $3x^2$ -5x +2 d. 4 + 3/x

2. The relation between F,V & 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. $1/3^7$ b. 3^7 c. 0 d. 2

4. $(a^2-2ab+b^2)$ = -------

   a. $(a + b)^2$ b. $(a – b)^2$ c. $a^2 – b^2$ d. $a^2 + b^2$

5. Reciprocal of 2/9 is _____

   a. 2/9 b. 9/2 c. -9/2 d. None

6. Multiplicative identity of any rational number p/q is _____

   a. 1 b. -1 c. 0 d. p/q

SECTION –B

Q.2 Attempt the following. **(2*6 = 12 M)**

7. Find the identity $(200)^2$
8. Find the identity $(197)^2$
9. Solve Find the square roots of the a. 3* 1/225
10. Solve Find the identity $(2000 + 5)^2$
11. Draw the number line and represent the following numbers on it : a. 7/4
12. list five rational numbers between: a. 1/3

SECTION –C

Q.3 Attempt the following. **(3*10 = 30 M)**

13. Explain Shortcut method to find Squares by Diagonal Method .
14. Substract $5x^2 – 4y^2 + 6y -3$ from $7x^2 -4xy +8y^2 +5x-3y$
15. Divide $(7x^2 +14x)$ by (x+2)

16. Show that $(3x+7)^2-84x = (3x-7)^2$

17. Explain Shortcut Method to find Squares by Coloumn method with the involving steps.

18. Find the square of 74 by using Column method.

19. Find the square of 542 by using diagonal method.

20. Find the square roots of the following by Prime factorisation Method : a. 400

21. Find the square roots of the following by division method: a. 900

22 . Find the square root of : a. 625/2116

SECTION –D

Q.4 Attempt the following. (4*8 = 32M)

23. Find the square roots of the following by repeated subtraction method. a. 100

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.

25. There are 100 students in a hostel . food provision last for them for 20 days. How long will these provision last , if 25 more students join the group.

26 . Represent -5/8 on a number line.

27. Find the Square root of (a.) 2 * 1/144 (b). 169/15625

28. Solve, 5/6 * (12/15 + 6/25)

29. Find the square roots by Prime factorisation Method: a. 729 b.9216

30. Find the square roots by Division method: a. 729 b. 676

THE END