CLASS   VIII   **Maximum marks : 60**

Sub: MATHEMATCS   **Time : 2:30 Hrs**

General Instructions:

     (i)   **All questions are compulsory.**

     (ii)   **The question paper contains 26 questions divided into four sections A, B,C and D. Section A contains 8 questions of 1 mark each. Section B contains 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.**

[Section A]

Select the correct answer from the given four alternative answers.

1. The product of -6*xy*   and *2x2* is

(a) 12xy   (b) -12x^2y (c) -8x^2y (d)-12x^3y

2. The number of faces in a triangular pyramid is

(a) 5   (b)   4   (c) 6   (d)3

3. If the edge of a cube is doubled then its surface area becomes

(a) 8 times   (b) 4times   (c) 2 times   (d) no change

4. The value of {5) $^{-2}$ is

(a)-25   (b)   -5   (c) $\frac{1}{25}$ (d) 10

5. If 6 persons   can dig a pit in 20 days, then 15   persons   can   dig it in:

 (a)8days   (b)   12days   (c)   15days   (d) 18days

6. Which one of the following points lies onX-axis

(a) (2,2)   (b)   (0,3)   (c)   (4,0)   (d) (2,5)

7.Which one of the following numbers is divisible by3

 (a) 436   (b) 531   (c)   208   (d) 235

8. The highest common factor of   -6*xy* *and 2x²* is

(a) 2x   (b)2xy   (c)3xy   (d)-3xy

[Section B]

9. Find the area of a rhombus whose side is 8cm and altitude is 4.5cm.

10. Subtract   2x- 3y + 4z from 7 x -8 y+ 5z.

11 Work out the following division

        {20x- 16 } ÷ (5x- 4) .

12.Plot the points (2,1) ,(0,4) ,(5,0) and(3,4) on   graph sheet.

13. How a prism and a cylinder are alike? Explain.

14. Find value of the letters in the following addition –

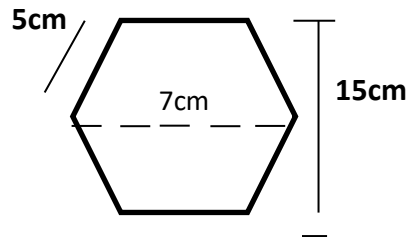   4 A

  + 9 8
  _____

  C B   3
  _____

[Section C]

15. Simplify: (3x + 5)²- (3x-5)²

16. using suitable identity evaluate: 195 x 205

17. A farmer has enough food to feed 20 animals for 6 days. How long would the food last if there were 10 more animals.
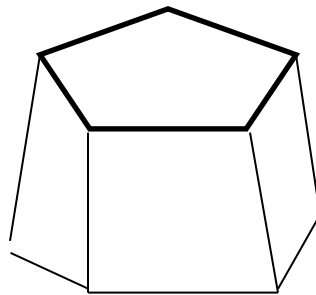
18. Simplify: $\{ (\frac{1}{3})^{-2} - (\frac{1}{4})^{-1}\}^{-1}$

19. From the given figure   find area   of the regular hexagon.

5cm

7cm

15cm

20. Factorize the following expression : $5x^2 - 20x - 8y + 2xy$

21. Verify the Euler's formula for the following solid.

22. A machine manufactures 480 articles in 6 hours . How many articles will it manufacture in 9 hours.

[Section D]

23. In a building there are 25 cylindrical pillars the radius of each pillar is 28cm and its height is 4m. Find total cost of painting the curved surface area of all pillars at the rate of Rs 10 per m^2. (Use $\pi = 22/7$)

24. Population(in thousands) of men in a village in different years is given below :

Year	2003	2004	2005	2006	2007
No. of men	12	12.7	11.3	13	13.2

Draw line graph for above data.

25. Factorise : i) $49x^2 - 25$ ii) $x^2 - 5x + 6$

26. Evaluate :(i) $\dfrac{3^{-5} \times 10^{-5} \times 25}{5^{-7} \times 6^{-5}}$ (ii) $\dfrac{8^{-2} \times 5^3}{2^{-3}}$