KUMARAGURU
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B.E/B.TECH DEGREE EXAMINATIONS: MAY 2018

(Regulation 2015)

Sixth Semester

U15MAOE03/ P15MAOE03: VEDIC MATHEMATICS

(Common to all Branches)

Time: Two Hours   **Maximum Marks: 100**

Answer all the Questions

PART A (20 x 1 = 20 Marks)

1   Find the square of 83

2   Find 10000-76

3   Find 122 x 128

4   Find 1/39

5   Find square of 113

6   Find 100-55.398

7   Find the digit sum of the number 67548074433

8   Multiply 421 by 13

9   Find the complement of 4356.

10   Add : 756+67+124 +243

11   Multiply   1844 x 12

12   Find the cube root of 636056

13   Add: 54365+23456 +34587

14   Verify whether 4736982 is divisible by 3 and 9.

15   Subtract : 3342 - 2852

16   Find 10012 x 10076

17   Find square root of 7569

18   What number should be added or subtracted from 537629, so that the number is divisible by 9.

19   Find 87465 x 11

20   Add: 643762 + 346976

Answer all the Questions
PART B (25 x 2 = 50 Marks)

21   Find the cube of 109

22   Find 9997 x 99.93

23   Divide 69879 by 87

24   A total land of 887406 sq. ft. is to be distributed among 93 people. How much area would each person get?

25   Factorize $3x^2 - 8xy + 4y^2 + 4y - 3$

26   If the marked price of an article is Rs. 3154 and discount of 34% is given on it, what is the selling price?

27   Find the area of the circle with radius 65.

28   Find the total surface area of the cube whose volume is 17576 cm^3.

29   Find the cube of 9996.

30   Find quotient and remainder when 16743 is divided by 111.

31   Multiply: (i) 37 x 99   (ii) 6543 x 999

32   Convert 5/41 into its decimal form.

33   Divide 5934 by 96

34   Convert the fraction 4/17 to its decimal form.

35   Find 32456 x 31111

36   Find the zeros of $12x^2 -23x + 10$

37   Find the area of square field with each side 76m.

38   Find the volume of a cube with side 47 cm.

39   Multiply 111114 x 111113

40   Find (i) 32419 x 11   (ii) 56789 x 12

41   Find the perimeter of square garden with area 8464 sq m.

42   Factorize $3x^2 + 4y^2 + 6z^2 + 7xy + 14yz + 11zx$

43   Find 24569 x 1111

44   (i) Add: 8738798+7582104   (ii) Find 50000 – 567.34

45   Find (i) 254 x 248   (ii) 467 x 511

Answer all the Questions

PART C (10 x 3 = 30 Marks)

46   (i) Find cube of 97   (ii) Find the roots of $15x^2 - 14x - 8 = 0$.

47   Find (i) 77 x 9988   (ii) 6887 x

48   Factorize $3x^2 + 2y^2 + 6z^2 + 11xz + 7yz + 7xy + 14x + 8y + 14z + 8$

49   7105A plane travels at a speed of 6856 miles per hour. How far will it travel in 53 hours?

50   (i) Find the largest 8 digit number which is exactly divisible by 10012.

      (ii) Multiply : 317456 x 99999999

51   Find (i) 563763 x 12   (ii) 136 x 134   (iii) 45876529 x 111

52   Multiply the following: (i) 999997 x 879655 (ii) 1189 x 99999999

53   Find the area of a rectangle with sides 123415 m and 98654 m.

54   Which is the greatest 9 digit number, which is a perfect cube?

55   Find the length of the side of a cube whose volume is equal to the area of a rectangle with length and breadth as 344 cm and 1849 cm.

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