



M 8255

Reg. No. :

Name :

VI Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.T.T.M./B.B.M./B.C.A./B.S.W./
B.A. Afsal-UI-Ulama Degree (CCSS – Reg./Supple./Improv.)
Examination, May 2015
OPEN COURSE
6D01 MAT : Vedic Mathematics

Time : 2 Hours

Max. Weightage : 20

PART – A

This Part consists of **two** bunches of questions carrying **equal** weightage of **one**.
Each bunch consists of **four** objective type questions. Answer **all** questions.

1. If a number consists of n digits, then its square must have _____ or _____ digits.
2. $\sqrt{0.000064} =$ _____
3. If $4x + 5 = 0$, then $x =$ _____
4. Samuccaya means _____
5. In vedic method, the formula used for squaring is _____
6. The auxiliary fraction for $\frac{3}{61}$ is _____
7. The alphabetical code 'mara' stands for the number _____
8. The value of $a + b + c$ when $a = 2$, $b = 4$ and $c = -5$ is _____ (2×1=2)

P.T.O.



PART - B

Answer **any six** questions. **Each** question carries a weightage of **one**.

9. Using suitable working base, find 635×502 .
10. At the rate of 7 annas 9 pies per foot, what will be the cost for 8 yards 1 foot 3 inches.
11. Divide $7x^2 + 5x + 3$ by $x - 1$.
12. Divide 1234 by 112 using paravartya sutra.
13. Find the volume of a parallelopiped whose dimensions are $3'7''$, $5'10''$ and $7'2''$.
14. Factorise $x^3 - 6x^2 + 11x - 6$.
15. Find the HCF of $x^4 + x^3 - 5x^2 - 3x + 2$ and $x^4 - 3x^3 + x^2 + 3x - 2$ by vedic method.
16. Solve : $(x + 7)(x + 9) = (x + 3)(x + 22)$.
17. Find the square of 889 using yavadunam sutra.
18. Explain the term negative osculation. (6x1=6)

PART - C

Answer **any four** questions. **Each** question carries a weightage of **two**.

19. Is 69492392 is divisible by 199 ?
20. Find the cube of
 - a) 12^3
 - b) 25^3 .
21. Divide 39999 by 9819 using Vinculum method.



22. Find $\frac{7x^2 + 5x + 3}{x - 1}$ using Paravartya Sutra.

23. Solve $\frac{3x + 4}{6x + 7} = \frac{x + 1}{2x + 3}$.

24. Find the square root of 738915489 by vedic method.

25. Solve : $x + \frac{1}{x} = \frac{17}{4}$.

26. Using suitable working base, find 235×247 .

(4x2=8)

PART - D

Answer **any one** question. **Each** question carries a weightage of **four**.

27. Using Samucaya rule solve the equation $\frac{x+a}{b+c} + \frac{x+b}{c+a} + \frac{x+c}{a+b} = -3$.

28. Solve the equations $x + y - z = 0$, $4x - 5y + 2z = 0$ and $3x + 2y + z = 10$.

29. Solve the equation $\frac{a}{x+a} + \frac{b}{x+b} = \frac{2c}{x+c}$.

(1x4=4)