Reg. No. : ....

Name : ....

BBA

III Semester B.B.A./B.B.A. (TTM)/B.B.A. R.T.M./B.B.M. Degree (CCSS – 2014 Admn. – Regular) Examination, November 2015 General Course for BBA/BBA TTM/BBA RTM/BBM 3A 12 BBA/BBA (TTM)/BBA (RTM)/3A 11 BBM : NUMERICAL SKILLS

Time : 3 Hours   Max. Marks : 40

SECTION – A

Answer the **4** questions. **Each** question carries $\frac{1}{2}$ mark.

1. The imaginary number of a complex number $a + bi$

2. In a Venn diagram universal set represents by

3. A is a matrix of order 4×3 and B is a matrix of order 3×5. What is the order of the matrix AB ?

4. A quadratic equation $ax^2 + bx + c = 0$ has equal roots if $(\frac{1}{2} \times 4 = 2)$

SECTION – B

Answer **any four** questions. **Each** question carries **1** mark.

5. What is present value ?

6. Define set.

7. What is arithmetic progression ?

8. Define matrices.

9. Write the formulae to find the nth term of a GP.

10. Write DeMorgan's law. $(4 \times 1 = 4)$

SECTION – C

Answer **any six** questions. **Each** question carries **3** marks.

11. What is compound interest ? And show the total interest is calculated.

12. Find the total interest and amount at the end of 8th year for 11,300 at 9% p.a. simple interest.

P.T.O.

13. If A = {1, 2, 3}, B = {2, 3, 4}, find

   i) $A \cup B$ ii) $A \cap B$ iii) $A - B$ iv) $B - A$

14. Find the inverse of the matrix

$$A = \begin{bmatrix} 3 & 5 & 7 \\ 2 & -3 & 1 \\ 1 & 1 & 2 \end{bmatrix}$$

15. Solve by factorising $x^2 - 6x + 8 = 0$.

16. Find the three consecutive number in the AP, whose sum is 27 and their product is 648.

17. Which term of the series

   $-2, 0, 2, 4, \ldots\ldots\ldots\ldots$ is 102 ?

18. Solve the system of equations by elimination method :

   $12x + 9y = 33$

   $12x - 8y = 16$ (6×3=18)

SECTION – D

Answer **any two** questions. **Each** question carries **8** marks.

19. If the 5th and 10th term of a GP are 32 and 1024 respectively. Find the first term and common ratio.

20. In a group of 65 people, 40 like cricket, 10 like both cricket and tennis. How many like tennis ? How many like tennis only and not cricket ?

21. Solve the system of equations with the help of matrices.

   $2x - 3y = 3$

   $4x - y = 11$ (2×8=16)

———————