ADITYA DEGREE COLLEGE

ANDHRA PRADESH

II SEM MID -I EXAMINATION

Subject:QMM   **Max. Marks: 60M**

Year/class:I / BBA-BA   **Time:2hr**

SECTION-A

WRITE ANY FIVE QUESTIONS   5 X 4 = 20 M

1.Transpose of matrix ?

2.Singular & non Singular matrix ?

3.Write bout maxima & minima ?

4. $\begin{pmatrix} 1 & 2 & 4 \\ 2 & 6 & 2 \\ 3 & 3 & 9 \end{pmatrix}$ find A^4 ?

5.Normal distribution and also properties ?

6.Define sample space,event,experiment,trail ?

7.Define matrix,types of matrix ?

8.If two dice are thrown ,find the the probability of getting a sum Is 10 ?

SECTION-B

WRITE ALL QUESTIONS FROM THE FOLLOWING   4 X 10 = 40 M

9. a) i)Define Probability ii) Conditional probability , iii) Independent events ?

OR

b)Define matrix algebra , types of matrices ?

10.a)$A=\begin{pmatrix} 1 & 2 & 3 \\ 3 & -2 & 1 \\ 4 & 1 & 1 \end{pmatrix}$, $\begin{pmatrix} 2 \\ 14 \\ 12 \end{pmatrix}$, $X=\begin{pmatrix} X \\ Y \\ Z \end{pmatrix}$ Slove crammers rule

OR

b) Discuss binomial distribution and also mean and variance ?

11.a)Obtain x,y,z values by using inversion method ?

X+Y+Z=6

3x+3y+4z = 20

2x+y+3z = 13   **OR**

b)Define axiomatic probability & also properties and pairwise and mutually exclusive ? ?

12.a)Slove $\begin{pmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{pmatrix}$ the relation $A^2-4A-5I=0$

OR

b)G.T P(A) = 0.4, P(AUB)= 0.9,and P(B)=P, for what value of P and A and B are independent ?