

Current Paper of MTH 501...DATE 11 may 2012 ...

Total 26 Questions:

20 MCQ'S and 6 Subjective.

All Subjective and MCQ'S are New Not any one from Past papers:

Subjective Questions are there:

Q: 21: If $A=B$, then determine the Value of x

and y , Where $A = \begin{bmatrix} 1 & Y+2 \\ X+2 & 3 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 2 \\ 4 & 3 \end{bmatrix}$.

MARKS: 2:

Q: 22: Let $A = \begin{bmatrix} 1 & 2 & 3 & 4 \\ 2 & 3 & 4 & 5 \\ 2 & 4 & 6 & 8 \end{bmatrix}$ \square $\begin{bmatrix} 1 & 0 & -1 & -2 \\ 0 & 1 & 2 & 3 \\ 0 & 0 & 0 & 0 \end{bmatrix}$, Solutions of

$Ax=0$ in term of free Variables are

$$x_1 = x_3 + 2x_4$$

$$x_2 = -2x_3 - 3x_4$$

$x_3 = \text{free of variable}$

$x_4 = \text{free of variable}$

MARKS: 2:

Q: 23: Determine the matrix is block upper triangular, Block lower triangular or Block diagonal.

$$B = \begin{bmatrix} \underline{1 \ 0 \ 0 \ 0} \\ 2 \ 3 \ 4 \ 0 \\ \underline{2 \ 1 \ 2 \ 0} \\ 3 \ 2 \ 0 \ 9 \end{bmatrix}$$

Q: 24: Determine the Value "s" for which the following system of Linear equation does not has unique solution:

$$Sx_1 + 2x_2 = 10$$

$$5x_1 + 7x_2 = 20 \quad ; 's' \text{ is parameter}$$

Q: 25: Compute the following by using product rule for

$(AB)_{23}, (AB)_{13}$ and $(AB)_{12}$;

$$A = \begin{bmatrix} 2 & 4 & 6 \\ 1 & 3 & 4 \end{bmatrix} \text{ and } B = \begin{bmatrix} 4 & 2 & 3 \\ 3 & 5 & 8 \\ 2 & 1 & 3 \end{bmatrix}.$$

MARKS: 5:

Q: 26: From Lecture number 22.