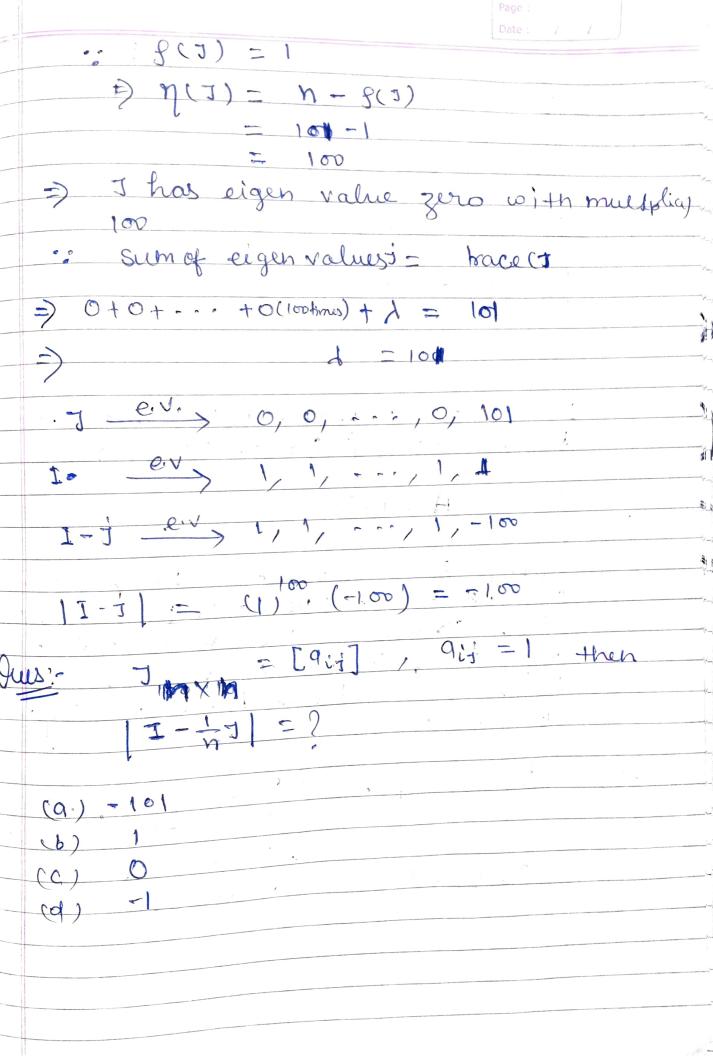
J101 X101 = [9ij] Oi; =1 then |I-I|=5(a) 101 (b) 1 (c) 0 (d) 100 (e) MOTA Sel (1) Consider & b an eigen value of A => there exist 9 non-zero vector x Such that AX=XX also IX = Xfor any scalar ao, a, such that $(Q_1A + Q_0I) \times = (Q_1\lambda + Q_0) \times$ => a, 1+ao jo an eigen value of hulity of a square matrix = number of eigen value which is zero.



J _e.v. 0,0, ---,0,(miltime, h 1 7 -> 0,0, ...,0, (nhme), 1 $I \longrightarrow 1, 1, \dots, 1,$ I- 1, 1, ..., 1, 0 $\left| I - \frac{1}{2} \right| = \left| 1 \right| \cdot 0 = 0$ Inverse of a matrix using elementary transformation (Gauss-Joselan method):-·: A = A.I Apply same elementary transformation on A of left side and I of right side. Transform the matrix A on test side, to identity matrix. The similar transformation, transfor the identity matrix on right side to A. -ex 9 nueve of $A = \begin{bmatrix} 1 & 3 & -2 \\ -3 & 0 & -5 \end{bmatrix}$, using $\begin{bmatrix} 2 & 5 & 0 \end{bmatrix}$

Gauss - Jordan method.

| | | | Page: Date: / / |
|---|-------|--|-----------------|
| 9 | A = | 0 1 2 7 , 1 | ind in |
| | using | elementary too | ensformation. |
| : | A = | $\begin{bmatrix} \frac{1}{2} & -\frac{1}{2} & \frac{1}{2} \\ -4 & 3 & -1 \\ \frac{5}{2} & -\frac{3}{2} & \frac{1}{2} \\ \frac{7}{2} & \frac{7}{2} & \frac{1}{2} \end{bmatrix}$ | 1 |
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