

CS GATE 2014

If the matrix A is such that

$$A = \begin{bmatrix} 2 \\ -4 \\ 7 \end{bmatrix} [1 \quad 9 \quad 5]$$

then the determinant of A is equal to

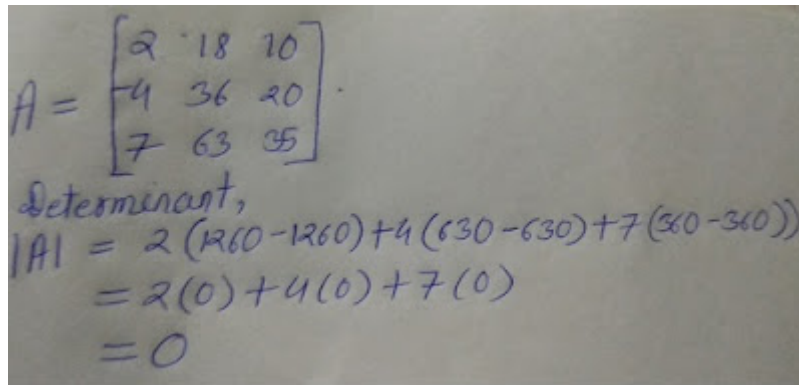
(A) 0

(B) 1

(C) 2

(D) 3

Sol.



Handwritten solution showing the matrix $A = \begin{bmatrix} 2 & 18 & 10 \\ -4 & 36 & 20 \\ 7 & 63 & 35 \end{bmatrix}$ and the calculation of its determinant:

$$\begin{aligned} \text{Determinant,} \\ |A| &= 2(1260 - 1260) + 4(630 - 630) + 7(360 - 360) \\ &= 2(0) + 4(0) + 7(0) \\ &= 0 \end{aligned}$$

Related posts:

2. Normal Forms
3. L-HOSPITAL RULE
4. Static Single Assignment

6. Birthday Attack