**UDOMAH, ENWONGO-ABASI MFON**

**18/SCI01/091**

**MAT 204**

Defined: A = 2 1 , B = 2 4 , C = 1 0

4 2 6 3 6 3

**3**.

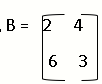
i.



|A| = 4 - 4 = 0

Since det. A = 0, Matrix A is a Singular Matrix .

ii.



|B| = 6 – 24 = -18

Since det. B = -18 and not 0, Matrix B is a non-singular matrix.

iii.

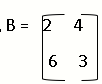


|C| = 3 – 0 = 3

Since det. C = 3 and not 0, Matrix C is a non-singular Matrix.

**2.**

(B + C) =

 + 

(B+C) = 3 6

6 6

Transpose of (B+C) = 3 6

6 6

Rank of Matrix (B+C);

Det. (B+C) = 18 – 36 = -18

Since Matrix (B + C) is a non-singular matrix;

Rank of Matrix (B+C) = **3**.