



**AFE BABALOLA UNIVERSITY, ADO-EKITI, EKITI STATE, NIGERIA**  
**COLLEGE OF ENGINEERING**  
**DEPARTMENT OF CHEMICAL AND PETROLEUM ENGINEERING**

**BACHELOR OF ENGINEERING ASSIGNMENT III**

**ENG 282: Engineering Mathematics II**

**Session:** 2019/2020

**Semester:** Second

**Unit:** 3

**Duration:** 5 days

**Instruction:** Answer all the questions.

**Question 1 [20 Marks]**

Given two matrices as in Equations (1) and (2), write programs to combine them in the forms given in Equations (3) and (4) using:

- (a) MathCAD *worksheet*, and
- (b) MATLAB *mfile*.

$$\mathbf{A} = \begin{bmatrix} 1 & 4 & 7 \\ 2 & 5 & 8 \\ 3 & 6 & 9 \end{bmatrix} \quad (1)$$

$$\mathbf{B} = \begin{bmatrix} 10 & 13 & 16 \\ 11 & 14 & 17 \\ 12 & 15 & 18 \end{bmatrix} \quad (2)$$

$$\mathbf{X} = \begin{bmatrix} 1 & 4 & 7 \\ 2 & 5 & 8 \\ 3 & 6 & 9 \\ 10 & 13 & 16 \\ 11 & 14 & 17 \\ 12 & 15 & 18 \end{bmatrix} \quad (3)$$

$$\mathbf{Y} = \begin{bmatrix} 1 & 4 & 7 & 10 & 13 & 16 \\ 2 & 5 & 8 & 11 & 14 & 17 \\ 3 & 6 & 9 & 12 & 15 & 18 \end{bmatrix} \quad (4)$$