

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

BACHELOR OF ENGINEERING ASSIGNMENT I

ENG 282: Engineering Mathematics II

Session: 2019/2020 **Semester:** Second **Unit:** 3 **Duration:** 3 days

Instruction: Answer all the questions.

Question 1 [20 Marks]

- (a) Define a dynamic equation.
- (b) An engineering system is described by the expression given in Equation (1). Develop a dynamic model in form of an ordinary differential equation for the system.

$$y = Ate^{t}$$
 (1)