

AFE BABALOLA UNIVERSITY, ADO-EKITI, EKITI STATE, NIGERIA COLLEGE OF ENGINEERING

BACHELOR OF ENGINEERING ASSIGNMENT III

ENG 281: Engineering Mathematics I

Session: 2019/2020 Semester: First Unit: 3 Duration: 7 days

Instruction: Answer all the questions.

Question 1 [10 Marks]

Find the area bounded by the curves $y = 3e^{2x}$ and $y = 3e^{-x}$ and the ordinates at x = 1 and x = 2.

Question 2 [10 Marks]

The parametric equations of a curve are $y = 2\sin\frac{\pi}{10}t$ and $x = 2 + 2t - 2\cos\frac{\pi}{10}t$. Find the area under the curve between t = 0 and t = 10.