

## ELIZADE UNIVERSITY, ILARA-MOKIN, ONDO STATE

#### **FACULTY OF ENGINEERING**

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

FIRST SEMESTER EXAMINATION, 2019/2020 ACADEMIC SESSION

COURSE TITLE: TELECOMMUNICATION ENGINEERING

**COURSE CODE: EEE 539** 

**EXAMINATION DATE: February**, 2020

**COURSE LECTURER: Prof Solomon Adeniran** 

**HOD's SIGNATURE** 

**TIME ALLOWED: 2 HOURS** 

### INSTRUCTIONS:

- 1. ANSWER ANY FOUR (4) QUESTIONS
- 2. SEVERE PENALTIES APPLY FOR MISCONDUCT, CHEATING, POSSESSION OF UNAUTHORIZED MATERIALS DURING EXAM.
- 3. YOU ARE <u>NOT</u> ALLOWED TO BORROW CALCULATORS AND ANY OTHER WRITING MATERIALS DURING THE EXAMINATION.

### Question 1

- 1 a. If the fact that noise does not accummulate on digital network and we see that as the principal advantage, then what is the principal disadvantage of any PCM transmission b. List the 8 functions of switching
- c. Write short notes on 4 of the aforementioned function

### Question 2

- 2 a. Discuss PBX and PABX.
- b. Is there any difference between the two?
- c. Write short notes on each of them.

#### **Question 3**

- 3. (a) Give two primary advantages of delta modulation and one principal disadvantage
- (b) What causes slope overloading
- (c) Use appropriate curve to show slope overloading and hunting in delta modulation.

### **Question 4**

4a Distinguish between Strowger and crossbar switches.

b. Discuss crossbar switch and how it operates.

# Question 5

- 5. (a) Give two primary advantages of delta modulation and one principal disadvantage
- (b) What causes slope overloading

# Question 6

- 6(a) Use appropriate curve to show slope overloading and hunting in delta modulation.
- (b) Give the three principal advantages of digital transmission