

**Faculty of Electrical & Electronics Engineering**  
**BEE 3413 Principles of Communication Systems**

Name: \_\_\_\_\_

ID: \_\_\_\_\_

Section: \_\_\_\_\_

Date: \_\_\_\_\_

### QUIZ 3

#### Mapping CO, PO, Domain, KI : CO1, PO1, C4

CO1: Analyze and differentiate various types of modulation and demodulation techniques.

PO2: Ability to acquire in-depth technical competency in specific engineering discipline

C4: Analysis

Based on the audio signal as in Figure 1, sampled, quantized and encodes the signal using PCM techniques. Assume sampling time is 400 kHz and the encoder is 3 bit encoder.

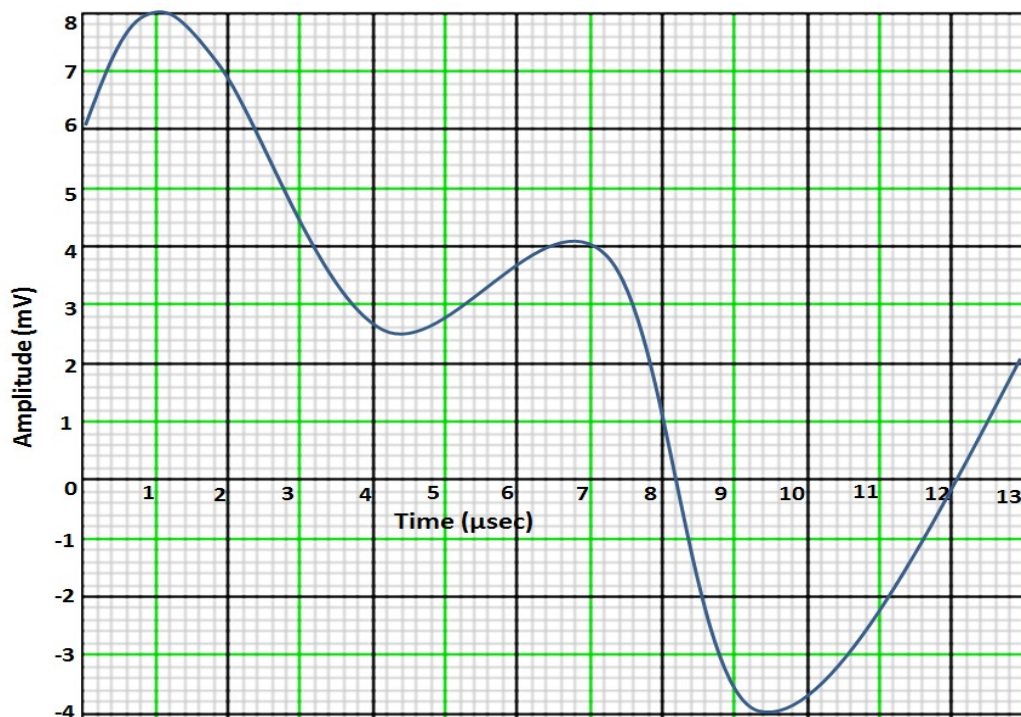


Figure 1

**[10 Marks]**