

**NETTUR TECHNICAL TRAINING FOUNDATION**  
**DIPLOMA IN ELECTRONICS ENGINEERING & EMBEDDED SYSTEM – CP04**  
**V SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JAN 2023**

**Subject: Digital Communication**  
**Subject Code: CP04505T**

**Total Time: 2 Hr.**  
**Total Marks: 50 Marks**

**PART B**

**1.0 ANSWER ANY EIGHT OF THE FOLLOWING** **2\*8=16**

- 1.1 Write the classification of pulse modulation
- 1.2 Which are the types of sampling?
- 1.3 Compare Mid-Rise type Quantization & Mid-Tread type Quantization
- 1.4 Name the 3 line coding techniques
- 1.5 What are the 3 possible digital modulation techniques?
- 1.6 Write a short note on BPSK & QPSK.
- 1.7 Define Signal & System
- 1.8 What are the types of error?
- 1.9 Draw the block diagram of CDMA system.
- 1.10 What is the role of a mobile switching Centre?

**2.0 ANSWER ANY SIX OF THE FOLLOWING** **3\*6=18**

- 2.1 Which are the types of quantization? Explain with its graph.
- 2.2 Draw the block diagram of PAM modulator and demodulator.
- 2.3 Write the comparison of analog and digital communication technique
- 2.4 Draw the FSK modulator block diagram and explain the working.
- 2.5 Which are the Error Correction Techniques? Explain.
- 2.6 How to identify periodic and non-periodic signal?
- 2.7 Explain about delta modulation.
- 2.8 Define Bit rate & Baud rate

**3.0 ANSWER ANY FOUR OF THE FOLLOWING** **4\*4=16**

- 3.1 What are the drawbacks of delta modulation? Explain
- 3.2 Draw the block diagram of PCM and explain its working
- 3.3 Draw and explain the GSM Architecture
- 3.4 Define Modem and explain its working
- 3.5 Explain: Cell, Cell Splitting, Sectoring, & Segmenting
- 3.6 Draw the block diagram of digital communication system & explain its operation

