



C14-AEI-603

**4707**

**BOARD DIPLOMA EXAMINATION, (C-14)  
OCT/NOV—2018  
DAEIE—SIXTH SEMESTER EXAMINATION  
COMMUNICATION ENGINEERING**

*Time* : 3 hours ]

[ *Total Marks* : 80

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**PART—A**

3×10=30

**Instructions** : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. State the need for modulation in communication system.
2. Define phase modulation.
3. Draw the circuit diagram of crystal receiver.
4. State the need for heterodyning in radio receiver.
5. List different types of pulse modulation method.
6. List the applications of PAM and PPM.
7. State the principle of satellite communication system.
8. State about SIM card of cell phone.

\* 9. Define LAN and WAN.

10. State the features of modem.

**PART—B**

10×5=50

**Instructions** : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain amplitude modulation with waveforms and expressions.

12. (a) Explain FM generation by using varactor diode.

(b) List any four comparisons between AM and FM.

13. Explain the principle of TRF receiver with block diagram.

14. Explain Foster-Seely demodulator with circuit diagram.

15. Explain time division and frequency division multiplexing methods with diagrams.

16. (a) Explain the principle of pulse modulation.

(b) List any five comparisons between CDMA and GSM.

\* 17. Explain the principle of radar with block diagram.

18. Explain video conferencing with block diagram.

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