

## MODEL QUESTION PAPER - II

Time : 3 Hrs

Max Marks : 100

Note : (i) Answer all the questions from Part - A. Each question carries 3 marks.

(ii) Answer division (A) or (B) of each question in Part - B. Each question carries fourteen marks.

### PART - A (10 x 3 = 30 Marks)

1. State the features of ISDN.
2. Define PPI display.
3. Define ASK modulator and demodulator.
4. Define EBCDIC code and state its advantages and disadvantages.
5. Define step index fiber and graded index fiber.
6. Define bending losses and specify its various types.
7. Define apogee and perigee.
8. Specify parabolic reflector antenna.
9. Define sectoring.
10. Define MSC and MTSSO.

### PART - B (5 x 14 = 70 Marks)

11. (A) (i) Explain ground controlled approach.  
(ii) With the block diagram explain video phone.

(OR)

(B) Draw the architecture of ISDN and explain it.

12. (A) What is error detection and correction codes?  
Explain any one of them.

(OR)

(B) (i) Explain Hamming code.

(ii) With a block diagram explain QPSK modulator.

13. (A) (i) Explain APD with diagram.

(ii) With the block diagram explain optical transmitter.

(OR)

(B) (i) Explain the principles of light transmission in a fiber using ray theory.

(ii) Explain bending losses.

14. (A) (i) With a diagram explain parametric amplifier.

(ii) Explain attitude control.

(OR)

(B) (i) State the advantages and disadvantages of geosynchronous satellites.

(ii) Explain TT and C subsystem.

15. (A) (i) With the diagram explain the simplified cellular telephone system.

(ii) Explain GSM radio subsystem.

(OR)

(B) Explain Bluetooth technology.