744 Register No.:

April 2018

Time – Three hours
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory. Answer any FOUR questions from the remaining in each PART – A and PART – B

(2) Answer division (a) or division (b) of each question in PART – C.

(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and 10 marks in PART – C.]

PART – A

1. Write about a basic RADAR system.
2. What is bending loss?
3. What is cross talk in a digital communication system?
4. What are redundant codes?
5. What is a single mode fiber?
6. What is splicing?
7. What is perigee?
8. What is video phone?

PART – B

9. Explain about electronic switching system.
10. Explain about IOC.
11. Explain any one of the digital modulation techniques.
12. Explain the differences between PIN and APD diodes.
13. Explain about Kepler's laws.
14. Explain about GPS.
15. Mention about frequency reuse in cellular system.
16. Mention about the basics of GPRS.

[Turn over.....

PART – C

17. (a) Explain about an instrument landing system.

(Or)

(b) Describe the ISDN architecture with a block diagram.

18. (a) Draw and explain the basic elements of a digital communication system.

(Or)

(b) Explain the block diagram and operation of FSK modulation and demodulation techniques.

19. (a) Describe about the principle of light transmission through fiber using ray theory.

(Or)

(b) Explain the operating principle of LASER as a fiber optic light source.

20. (a) Explain: (i)Earth eclipse of a satellite (ii)Station keeping.

(Or)

(b) Explain microwave link repeater with a block diagram.

21. (a) Explain the simplified cellular system.

(Or)

(b) Explain the basics of Bluetooth technology.
