



B.TECH.

THEORY EXAMINATION (SEM-VIII) 2016-17

SATELLITE COMMUNICATION

Time : 3 Hours

Max. Marks : 100

Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.

SECTION – A

1. Explain the following:

10 x 2 = 20

- (a) Define VSAT
- (b) Define small earth station
- (c) What is non-geostationary
- (d) Define CDMA.
- (e) What is pre-Emphasis?
- (f) What is TTC&M.
- (g) What is look angle?
- (h) What is Modulation?
- (i) What is ice effects
- (j) What is downlink design?

SECTION – B

2. Attempt any five of the following questions:

5 x 10 = 50

- (a) Describe FDMA and TDMA in detail.
- (b) Explain satellite systems using small earth station.
- (c) Explain Error control for digital satellite links in detail.
- (d) Discuss Explain global positioning systems.
- (e) Explain cyclic block codes with example.
- (f) Explain demodulation techniques.
- (g) Explain system noise temperature and G/T ratio
- (h) Explain multiplexing techniques for satellite links.

SECTION – C

Attempt any two of the following questions:

2 x 15 = 30

- 3 Explain satellite navigation and the global positioning systems.
- 4 Explain elements of Satellite Communication Orbital mechanics.
- 5 Explain direct broadcast satellite television and radio.