

24441

B.Tech. 7th Semester (F) Scheme (ECE) Examination,

December-2018

**SATELLITE COMMUNICATION**

**Paper-ECE-403-F**

*Time allowed : 3 hours]*

*[Maximum marks : 100*

*Note : Question no. 1 is compulsory and attempt any one question from each section.*

1. Explain the following terms : 20
- (a) C/N ratio
  - (b) TDM
  - (c) CDMA
  - (d) MSAT

**Section-A**

2. (a) Compare Active and Passive Satellite. 10  
(b) Describe advantages of satellite communication. 10
3. (a) Describe General Link design equations. 10  
(b) Explain Atmospheric & Ionospheric effects on link design. 10

**Section-B**

4. Describe various digital modulation techniques. 20

24441-P-2-Q-9(18)

[P. T. O.]

5. (a) Explain FDM TV Satellite link. 10  
(b) Discuss Energy disposal in FM system. 10

**Section-C**

6. (a) What is Beam Hopping ? Explain. 10  
(b) What is TDMA-burst structure ? 10
7. (a) Describe various orbital parameters. 10  
(b) What is synchronous orbit ? Explain. 10

**Section-D**

8. (a) Explain Satellite communication with respect to  
Fiber optic communication. 10  
(b) What is tracking & positioning ? 10
9. Explain the following terms: 20  
(a) VSAT  
(b) LEDs