

24441

**B. Tech. 7th Semester (ECE)
Examination, December-2015**

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. Write short notes on the following : 20
- (a) G/T ratio (b) FDM systems
(c) Eclipse effect (d) BDS.

Section-A

2. (a) Write various Applications of satellite communication. 10
(b) Explain various Earth Station parameters. 10
3. (a) What is the difference between Active and passive satellite. 10
(b) What are advantages of satellite communication. 10

Section-B

4. (a) What are inter modulation products and their effects in FM/FDM systems. 10
(b) Explain elements of digital satellite communication system. 10

(2)

24441

5. (a) Explain single channel per carrier systems. 10
(b) Describe Time division multiplexing. 10

Section-C

6. Describe TDMA-frame structure and TDMA Burst structure in detail. 20
7. (a) Explain orbital parameters in detail. 10
(b) What is satellite stabilization ? 10

Section-D

8. What are special purpose communication satellite ? Explain in detail. 20
9. (a) Differentiate between optical satellite link transmitter and receiver. 10
(b) Explain satellite communication with respect to fiber optic communication. 10