

22661

M.Tech 1st Semester (ECE) CBCS scheme
Examination, December-2017

SATELLITE AND SPACE COMMUNICATION

Paper-MTECE 21C2

Time allowed : 3 hours]

[Maximum marks : 100

Note : Question no. 1 is compulsory. Attempt any one question from each section.

1. Explain the following :
 - (a) Frequency Allocation 5
 - (b) Angle of Evaluation 5
 - (c) Returning Period 5
 - (d) Ionospheric Scintillation 5
2. (a) What do you mean by active and passive satellite ? Explain in detail with proper examples. 10
(b) What is satellite communication? Explain with the help of the block diagram. 10
3. (a) What do you mean by synchronous satellite ? Differentiate between Geostationary and Geosynchronous satellites in detail. 10
(b) Briefly describe the different advantages of the satellite. 10

22661-P-2-Q-9(17)

[P.T.O.]

4. (a) Differentiate between low, medium and Geo-synchronous in detail. 10
- (b) What is Kepler's laws ? Explain the delay transponder in detail. 10
5. Explain the following :
- (a) Earth Station 7
- (b) Altitude and Eclipse 7
- (c) Propagation Delay 6
6. What are the different types of earth space propagation effects ? Explain each in detail. 20
7. What do you mean by QPSK and offset QPSK ? Differentiate and explain the working of each in detail. 20
8. Explain the following :
- (a) VSAT 10
- (b) TELSAT 10
9. What do you mean by multiple access technique ? Explain each in detail. 20

22661