

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

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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