

22661

M.Tech. 1st Semester (ECE) CBCS Scheme

Examination, December-2019

SATELLITE AND SPACE COMMUNICATION

Paper-MTECE21C2

Time allowed : 3 hours]

[Maximum marks : 100

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

1. (a) What do you mean by geo-synchronous satellite ?
 (b) Define Active and Passive Satellite.
 (c) Define Attitude and eclipses.
 (d) What do you mean by GPS systems ? $4 \times 5 = 20$

Section-A

2. Explain satellite frequency allocation and band spectrum in detail.

or

3. What are different applications of satellite ? Discuss in detail.

Section-B

4. Explain in delay transponders, Earth stations with antennas and earth coverage. 20

or

5. Derive the up link and down link equations in satellite communication. 20

(2)

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Section-C

6. Write short note on : 20

(i) Free Space loss

(ii) Telemetry

or

7. Explain MSK in detail with diagram. 20

Section-D

8. Write short note on : 20

(i) TELSAT

(ii) INSAT

or

9. Explain different multiplexing techniques with diagram. 20