

Roll No. :

Total No. of Questions : 9] [Total No. of Pages : 3

22661

**M.Tech. (ECE) 1st Semester
Examination, March-2021
(CBCS Scheme)**

**SATELLITE AND SPACE COMMUNICATION
Paper-MTECE21C2**

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note :- Attempt *five* questions in all, selecting *one* question from each Section. Question No. 1 is compulsory. All questions carry equal marks.

1. (a) What do you mean by Synchronous Satellite ?
- (b) What do you understand by coherent and non-coherent detection ?

(c) Define Error rate performance.

(d) Define VSAT in brief. $5 \times 4 = 20$

Section-A 20 each

2. Briefly explain the history of evolution and growth of communication Satellite with a suitable table.

Or

3. What are the different advantages and disadvantages of Satellite Communication ?

Section-B 20 each

4. Explain low, medium and geo-synchronous satellite with their characteristics.

Or

5. Derive the equation of down link and up-link Satellite Communication.

Section-C 20 each

6. Explain how tracking and command of satellites is done in detail.

Or

7. Explain the concept of QPSK with diagram.

Section-D

20 each

8. Explain the different multiplexing techniques in detail.

Or

9. Explain in detail VSAT with diagram.