

**B. TECH. (CBCS - 2014 COURSE) SEM -VIII (E & TC ENGG.)
: SUMMER - 2018**

SUBJECT: SATELLITE COMMUNICATION

Day : **Tuesday**
Date : **05/06/2018**

S-2018-4724

Time : **02.30 PM TO 05.30 PM**
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Assume suitable data, if necessary.

- Q.1** a) What are keplers three laws of planetary motion? (05)
b) Explain the parameters to describe satellite orbit? (05)

OR

- Q.1** Explain elevation angle calculation and azimuth angle calculation for antenna at receiving at station? (10)

- Q.2** a) Explain basic antenna types used for satellite? (05)
b) Explain TTMC in satellite? (05)

OR

- Q.2** Explain attitude and Orbit control system (AOCS) of satellite? (10)

- Q.3** a) Write design processor for satellite communication? (05)
b) Explain in short uplink and down link attenuation? (05)

OR

- Q.3** Explain design of link for specified C/N? (10)

- Q.4** a) Explain on board concavity with beam scanning? (05)
b) What are characteristic of satellite networks? (05)

OR

- Q.4** Network architecture for VSAT system? (10)

- Q.5** a) Describe coverage area for satellite system? (05)
b) Explain delay and throughput for satellite system? (05)

OR

- Q.5** Describe NGSO constellation design? (10)

- Q.6** a) GPS position location principles? (05)
b) C-band , Ku-Band in satellite? (05)

OR

- Q.6** Satellite radio broad Casting? (10)

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