

Code No: **R42043****R10****Set No. 1****IV B.Tech II Semester Supplementary Examinations, April - 2018****SATELLITE COMMUNICATIONS**
(Electronics and Communication Engineering)**Time: 3 hours****Max. Marks: 75****Answer any FIVE Questions**
All Questions carry equal marks

- 1 a) Mention the advantage of digital satellite communication over its analog counter part. [8]
b) Write a detailed summary about the satellite communication in the 21st century. [7]
- 2 Discuss in detail the orbital effect in satellite communication system performance. [15]
- 3 a) On what factor the electrical power requirement in satellite depends and explains the electrical power distribution in a satellite. [8]
b) Describe the three types of antennas used in satellites. [7]
- 4 a) Explain the design of uplinking. [8]
b) Explain the effect of noise and interference on the performance of satellites. [7]
- 5 a) Explain the demand access multiple access (DAMA). [8]
b) Explain the spread spectrum transmission and reception. [7]
- 6 Discuss the primary power test methods. [15]
- 7 a) Explain system consideration factors. [7]
b) Explain satellite based store-and-forward messages [8]
- 8 a) Write a short on differential GPS. [7]
b) Explain how signal is acquired in satellite system and GPS signal levels. [8]