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Question Paper Code : 51230

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Seventh Semester

Electronics and Communication Engineering

EC 1403 — SATELLITE COMMUNICATION

(Regulation 2008)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. State Kepler's second law.

2. What is meant by sidereal time?

3. Define azimuth angle.

4. What is a propellant?

5. Define sky noise.

6. What is polarization interleaving?

7. Define preamble.

8. List out the different types of digital speech interpolation.

9. What is map?

10. What is meant by overlaying?

PART B — (5 × 16 = 80 marks)

11. (a) Explain in detail about various measure of time.

Or

(b) Explain the orbital plane. Draw its neat sketch.

12. (a) Explain the attitude control. Draw its neat sketch.

Or

(b) Explain the look angle determination with neat sketch.

13. (a) Draw the block diagram and explain the receive only home TV systems.

Or

(b) Explain in detail about

(i) EIRP (8)

(ii) Transmission Losses (8)

14. (a) Explain the multiplexing and modulation schemes with FDMA technique with block diagram.

Or

(b) Explain the satellite switched TDMA and CDMA. Draw the neat sketch.

15. (a) Explain about data input hardware of GIS.

Or

(b) Explain the following satellite applications.

(i) Global positioning system (8)

(ii) Satellite navigation system. (8)