

**(DEC 412)**

**B.Tech DEGREE EXAMINATION, MAY - 2015**

**(Examination at the end of Final Year)**

**ELECTRONICS & COMMUNICATION ENGG.**

**Paper - II : Satellite Communication**

**Time : 3 Hours**

**Maximum Marks : 75**

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*Answer Question No.1 compulsory*

*(15)*

*Answer ONE Question from each unit*

*(4 × 15 = 60)*

- 1) a) What are the applications of satellite system?
- b) Define polar-orbiting satellite.
- c) What is FHSS?
- d) Define apogee & perigee.
- e) Write the formula for GST.
- f) What is fast frequency hopping?
- g) Write the equation of C/N ratio.

**UNIT - I**

- 2) a) Explain orbital perturbation's.
- b) Explain the determination of Look angle.

OR

- 3) a) Explain the various satellite orbits.
- b) State Kepler's first & second law.

**UNIT - II**

- 4) a) Explain TDMA, FDMA & CDMA.
- b) Explain briefly about power system used in a satellite.

OR

- 5) a) Write short notes on DAMA satellite system.  
b) Explain sub satellite point.

**UNIT - III**

- 6) a) Write short notes on VSAT system.  
b) Explain the EIRP & transmission losses.

OR

- 7) a) Explain the design of uplink & downlink models.  
b) Draw the block diagram & explain the system noise temperature.

**UNIT - IV**

- 8) a) Explain DSSS with CBPSK.  
b) Explain the types of practical jammer.

OR

- 9) a) Explain Acquisition & tracking.  
b) Explain clearly about THSS.

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