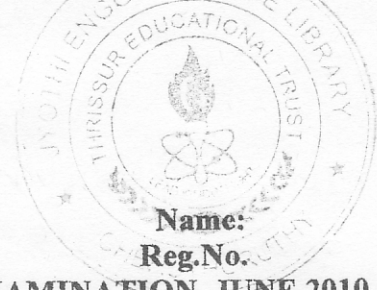


5115



EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, JUNE 2010

EC.2K.805(E) – Satellite Communication

(Common to AI/EE/IC/PTEE.2K.803.E)

Time: Three hours

Maximum: 100 marks

(Answer all questions)

1. a. Explain what is meant by Hohmann transfer.
b. State Kepler's Law.
c. Explain what is meant by Earth Station Amplifiers.
d. Explain what is meant by telemetry.
e. Explain what is meant by antenna noise.
f. Explain the frequency bands used in satellite communication.
g. What is meant by protocol? Brief about access protocols for data traffic.
h. Explain what is meant by tracking.

(8x5=40 marks)

2. a. i. Explain what is meant by atmospheric drag.
ii. Explain what is meant by effect of earth's shape.

OR

- b. Write short notes on:
i. Period and Velocity ii. Position of a satellite iii. Satellite trajectory

3. a. i. Explain briefly about antenna feed systems.
ii. What is meant by repeater? Explain about power subsystem.

OR

- b. Explain in detail fixed and Mobile Satellite Service Earth Station.

4. a. What is meant by transmission loss? Explain in detail antenna parameters.

OR

- b. Write short notes on:
i. Link design
ii. VSAT

5. a. Explain in detail about the SPADE system of demand assignment.

OR

- b. i. Explain Frequency Division Multiple Access.
ii. Explain Code Division Multiple Access.

(4x15=60 marks)

.....