C 61445 (Pages : 2) Name.....

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SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, APRIL 2014

EC/PTEC 09 L05—SATELLITE COMMUNICATION

(2009 Scheme)

[Regular/Supplementary/Improvement]

Time : Three Hours Maximum : 70 Marks

Part A

Answer **all** *questions.*
Each question carries 2 *marks.*

1. Define retrograde orbit and perigee.
2. What is a telemetry system ?
3. Define noise temperature.
4. What is a multiple access system ?
5. What is GPS ?

(5 × 2 = 10 marks)

Part B

Answer any **four** *questions.*
Each question carries 5 *marks.*

6. Discuss the effect of sun transit outage on solar communication.
7. Write briefly on satellite antennas.
8. Explain input back-off and output back-off.
9. Write briefly on VSAT system.
10. Explain a TDMA system.
11. Discuss on link power budget equation.

(4 × 5 = 20 marks)

Part C

Answer **all** *questions.*
Each question carries 10 *marks.*

12. (a) (i) Discuss on Kepler's laws.

(ii) Write notes on orbital perturbations.

Or

(b) Explain on satellite lauching and launch vehicles.

Turn over

13. (a) Explain about (i) Attitude and Orbit control system and (ii) Transponders.

Or

(b) Explain briefly antenna subsystems.

14. (a) Explain the satellite system noise.

Or

(b) Explain the effects of rain on satelite communication.

15. (a) Explain briefly FDMA and CDMA.

Or

(b) (i) Explain DAMA.

(ii) Write notes on DBS system.

(4 × 10 = 40 marks)