Roll No. | | | | | | | | | | |

B.E./B.Tech.(Full Time) DEGREE END SEMESTER EXAMINATION , APRIL/MAY 2011

Electronics and Communication Engineering

Sixth Semester

EC381 Digital Switching and Transmission

(Regulation - 2004)

Time: Three hours Maximum ; 100 Marks

Answer all questions

Part- A (10x2=20 marks)

1. What is PCM?
2. Differentiate data and multimedia networks.
3. List any four line coding techniques
4. What is framing?
5. What is local loop?
6. What is DSL?
7. What is the meaning of blocking in telecommunication?
8. Differentiate message and packet switching techniques
9. How will you statistically model the call arrival in a telecommunication network?
10. What is Erlang-B formula

Part-B (5x16=80)

11. a) Write the basic building blocks of a data communication network and explain the role of each block in detail

12. a) (i) Explain time division multiplexing system and brief the T1 system
    (ii) Brief the frequency division multiplexing system with suitable diagrams

    OR

    b) Briefly explain the data transmission by SONET/SDH systems.

13. a) Write brief note on (i) ISDN, (ii) Satellite communication networks

    OR

    b) Write brief note on (i) WLL and (ii) Fiber in Local loop

14. a) With neat diagrams, briefly explain (i) Time switching, (ii) Combination switching

OR

b) With suitable example brief the data transfer with (i) Circuit Switching, (ii) Message switching, (iii) Packet switching

15. a) Derive the blocking probability formula lost call cleared model with infinite source.

OR

b) What are delay networks? Briefly explain the advantages of the network over last call cleared systems.