

**Code: 9D06104**

M.Tech I Semester Regular &amp; Supplementary Examinations January/February 2017

**ADVANCED DATA COMMUNICATIONS**

(Digital Systems and Computer Electronics)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 (a) Give the comparison of ASK, FSK and PSK.  
(b) Discuss about DPSK generation, recovery and its bandwidth consideration in detail.
- 2 Discuss the consequences if a connection fails for the following type of network:  
(a) Five devices arranged in mesh topology.  
(b) Five devices arranged in star topology.  
(c) Five devices arranged in tree topology.
- 3 (a) Describe about the features, operations and benefits of LAN and WAN.  
(b) Explain about DTE – DCE interface.
- 4 The code 11110101101 was received. Using hamming encoding algorithm, what is the original code sent. How to correct the burst error?
- 5 Illustrate with example and explain the operation of stop and wait protocol.
- 6 What are the types of switches used in circuit switching? Explain each type in detail.
- 7 Illustrate with diagram and write down the procedure for carriers sense multiple access collision detection and collision avoidance.
- 8 Name three channelization protocols. Give comparison of the same.

\*\*\*\*\*