

**M. Tech. 1st Semester (ECE) CBCS Scheme
Examination, December-2018
DATA COMMUNICATION NETWORKS
Paper- MTECE-21C5**

Time allowed : 3 hours] [Maximum marks : 100

Note: Question No.1 is compulsory. Attempt any one question from each section.

1. (a) What do you mean by Asynchronous transmission? 5
- (b) Differentiate between connectionless and connection-oriented switching. 5
- (c) Explain any two Transport layer protocols. 5
- (d) What do you mean by statistical TDM? 5

Section-A

2. (a) Explain different types of Transmission impairments in detail. 10
- (b) Explain different error detection details with an example. 10
3. (a) What do you mean by Data communication system? Explain different components of a data communication system. 10
- (b) What do you mean by error correction? Explain any one error correction technique. 10

Section-B

4. (a) Explain different types of sliding window protocols in detail. 10
- (b) Explain different types of services provided by Data link layer. 10
5. (a) Differentiate between synchronous and statistical TDM. <http://www.HaryanaPapers.com> 10
- (b) What do you mean by link control? Explain. 10

Section-C

6. (a) Explain in detail the concept of DQDB with the help of diagram. 10
- (b) Differentiate between circuit switching and packet switching. 10
7. (a) Explain FDDI with the help of diagram. 10
- (b) Differentiate between pure ALOHA and slotted ALOHA. 10

Section-D

8. Explain OSI model and its layers in detail with the help of diagram. 20
9. (a) Discuss about the concept of ISDN with its architecture. 10
- (b) Explain different session layer protocols in detail. 10