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Total No. of Pages : 02

Total No. of Questions : 07

B.Sc.(CS) (2013 & Onwards) (Sem.-4)
DATA COMMUNICATION AND COMPUTER NETWORKS

Subject Code : BCS-406

M.Code : 72322

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.

SECTION-A

1. Answer briefly :

- a) What is meant by transmission?
- b) Differentiate Serial and Parallel communication.
- c) What is meant by Broadband?
- d) Discuss briefly the merits of satellite transmission.
- e) Comment on the reliability of bus-topology.
- f) What is MAC?
- g) List any two differences between CDMA & TDMA.
- h) Name any two services provided by session layer.
- i) What is SLIP?
- j) Define Token-Ring.

SECTION-B

2. Differentiate the following concepts:
 - a) Synchronous and Asynchronous Communication
 - b) Digital and Analog Transmission
3.
 - a) Discuss the reliability of bus topology when compared with ring, star and mesh. Justify the answer by taking suitable example.
 - b) Discuss the concept of transmission used for fiber optics.
4.
 - a) Explain the concept of message switching by taking suitable examples.
 - b) Draw and explain TCP/IP reference model with different layers.
5.
 - a) Discuss various services provided by presentation layer.
 - b) Explain the concept of Go-Back-N protocol by taking some suitable examples.
6.
 - a) Discuss the concept of CDMA/CD in detail.
 - b) What is shortest path routing? Explain by taking suitable example.
7. Explain the following concepts :
 - a) Framing
 - b) IEEE 802.4

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.