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Total No. of Pages : 02

Total No. of Questions : 09

PGDCA (2014 & Onwards) (Sem.-2)
DATA COMMUNICATION AND NETWORKS

Subject Code : PDCA-204

Paper ID : [B0153]

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 **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

Q1 Write short notes on following :

- a) Differentiate analog and digital communication.
- b) Write the advantages of optical fiber optics.
- c) Explain the minimum hamming distance for error detection.
- d) Compare FDM with TDM.
- e) What is network standardization?
- f) What is the purpose of HDLC?
- g) Discuss shortest path routing algorithm.
- h) Define sliding window protocol.
- i) What is Checksum in error detection?
- j) Discuss flow control and buffering.

SECTION-B

- Q2 Write a short note on Network Software.
- Q3 Explain the carrier sense multiple accesses with collision detection.
- Q4 Compare and contrast message switching and packet switching.
- Q5 Write in short the IEEE standards 802 for LAN and WAN.
- Q6 Discuss the IP address frame format. What is subnet masking?

SECTION-C

- Q7 Explain the Architecture of TCP/IP Model.
- Q8 Name different congestion control algorithms and write a note on any of one.
- Q9 What are responsibilities of transport layer in Internet Model?