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Total No. of Pages : 02

Total No. of Questions : 07

BCA (Sem.-3)
COMPUTER NETWORKS
Subject Code : UGCA-1913
M.Code : 78179
Date of Examination : 21-12-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS 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 students have to attempt any **FOUR** questions.

SECTION-A

1. Write briefly :

- a) Differentiate between Circuit Switching and Packet Switching.
- b) Write at least two advantages of Ring topology.
- c) Explain in brief about leased lines.
- d) Explain the term Noise and Distortion in reference to transmission impairments.
- e) Explain the term Flow Control in Data link layer.
- f) What is the need of Error detection? Explain in brief.
- g) Why do we need congestion control?
- h) Write at least two advantages of Token Bucket algorithm.
- i) Explain in brief about TCP protocol.
- j) Explain the term Cryptography in reference to presentation layer.

SECTION-B

2. **Explain the following network topologies along with their advantages and disadvantages:**
 - a) Star
 - b) Bus
 - c) Mesh
3. **Write a detailed note on following Wired transmission**
 - a) Coaxial cables
 - b) Optical Fiber transmission
4. Explain in detail about the error detection and correction code.
5. **Explain the following protocols in detail :**
 - a) SLIP
 - b) PPP
6.
 - a) Explain CSMA/CD in detail.
 - b) Write a detailed note on Congestion control policies.
7. **Write a detailed note on following in reference to Transport layer :**
 - a) Connection Establishment and release
 - b) Flow control and buffering.

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