## MCADD-602

## M.C.A. (Integrated), VI Semester

Examination, November 2019

## **Advanced Computer Networks**

Time: Three Hours

Maximum Marks: 70

- Note: i) Attempt any five questions.
  - ii) All questions carry equal marks.
  - a) Explain ISO-OSI model. Discuss function of each layer with diagram.
    - Explain different communication media used in computer networking.
  - a) Differentiate between modulation and demodulation by an example.
    - Explain Carrier Sense Multiple Access with Collision Detection algorithm (CSMA/CD).
- 3. a) What is modem? Discuss its working. Also write down types of modem.
  - b) Write short notes:
    - i) DPCM
    - ii) PAM
  - 4. a) Write a brief note on CRC codes.
    - b) Describe sliding window protocol with an example.

PTO

- 5. a) What is a finite state machine? Differentiate between deterministic and non deterministic finite state machine.
  - b) How Open Shortest Path First (OSPF) work? Explain with an example.
- 6. a) Explain the concept of Token box and Token ring.
  - b) Explain the following:
    - i) Repeater
    - ii) Bridges
- 7. a) How connection is established and terminated in TCP using three way handshaking mechanism?
  - b) Explain Dijkastra's algorithm with an example.
- 8. Write short notes:
  - i) Virtual Terminal Protocol
  - ii) SNMP
  - iii) DNS
  - iv) Multimedia

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