

Roll No .....

## 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.

1. a) Explain ISO-OSI model. Discuss function of each layer with diagram.  
b) Explain different communication media used in computer networking.
2. a) Differentiate between modulation and demodulation by an example.  
b) 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.

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 Dijkstra's algorithm with an example.
8. Write short notes:  
i) Virtual Terminal Protocol  
ii) SNMP  
iii) DNS  
iv) Multimedia

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