

Roll No

MCADD-402

M.C.A. (Integrated), IV Semester

Examination, November 2019

Foundation of Computer Networks

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Explain OSI reference model.
b) Discuss the advantages of star, ring and Bus topology.
2. a) What are the advantages of twisted pair? Explain shielded and unshielded twisted pair.
b) What are the characteristics of Optical fibre?
3. a) What are the responsibilities of medium access control sublayer?
b) Explain ALOHA and its types.
4. a) What is the function of Data Link layer?
b) Explain sliding window protocol. How do you measure a window for sliding window protocol?
5. a) Explain point to point network protocol.
b) What is Routing table? How does it work?

6. Explain the following internet working devices.

- i) Repeaters
- ii) Bridges
- iii) Modem
- iv) Gateways
- v) Switches
- vi) Hubs

7. a) What is leaky bucket algorithm? Where it is used?

b) What is UDP? How it is different from TCP?

8. Write short notes on any three:

- i) Electronic mail
- ii) TCP
- iii) Data compression techniques
- iv) Congestion
- v) Link state routing
