COURSE ASSESSMENT(Computer Networks)

Maximum Marks: 30

Submission date: 5 th April, 2020

Note:

1. The answers should be unique as the answers will be evaluated using the plagiarism checker.
2. The percentage of similarity of the answers will result in the deduction of marks.
3. Papers found completely matching is a sign unfair means.

Q1. With the help of a suitable diagrams wherever required, explain the role of layer 2, keeping in view of the services it provides at the sender and the receiver end.

Note: You need to take describe the concepts related to layer 2 as a whole. **[10 marks]**

Q2. An organization namely LPU was using class full addressing but shifted to classless addressing, provide the 2 appropriate reasons with justification. **[2 marks]**

Q3. If a router forwards the packets to another router which is not a destination, but one of the paths in the route, what can we call this and why? **[2 marks]**

Q4. Suppose block 34 of LPU forwarded a packet to the speaker node of block 51, and the packet was rejected by 51 block, what could be the possible reasons for rejection? **[2 marks]**

Q5. Suppose LPU is using 12.67.88.10 network, is this representation correct? If yes then how? If not then what is the correct representation? **[2 marks]**

Q6. Suppose one of the hosts of block 33 of LPU is using 128.17.19.11 address and wants to communicate with host of block 38 that uses FF10::FF67, how can the communication be successful? **[2 marks]**

Q7. Do you think dynamic routing is always better? Justify your answer. **[2 marks]**

Q8. What is the role of a speaker node? What if speaker node is not present, can you suggest any solution? **[2 marks]**

Q9. Suppose you need to design a dynamic routing algorithm, which parameters you will take into consideration and why? **[2 marks]**

Q10. Use Dijktra's algorithm to find the shortest path tree and forwarding tables for each node in the Fig (a).

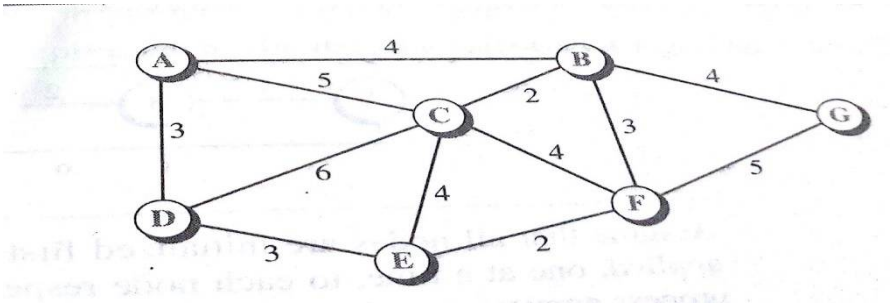

Fig (a)

[4 marks]