

END SEMESTER EXAMINATION, MAY/JUNE - 2019**MCA THIRD SEMESTER****COURSE CODE: MCA201****COURSE TITLE: ADVANCED COMPUTER NETWORKS****[Time allotted: Three hours]****[Max. Marks: 100]****Note:** Attempt all Sections & Questions.**Section (A)****Q.1. Attempt all questions.****(2 x 10 = 20)**

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| <ul style="list-style-type: none">a.b. Define message switching.c. Explain mesh topology.d. Define WAN.e. Write two applications of RARP.f. What are the functions of router?g. Draw the header format of IP. | <ul style="list-style-type: none">h. What is POP?i. What is a subnet?j. What are the advantages of using sensor network?k. Name three application layer protocols for TCP/IP networks. |
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Section (B)**Q.2. Attempt any 5 questions.****(7 x 5 = 35)**

- a. Explain Integrated quality of service in detail.
- b. Routing algorithms in TCP/IP network are divided in two categories. Elaborate each in detail.
- c. Define switch fabrics. How concept of switch fabric evolves.
- d. Is reactive routing protocol mean? Explain about any one of it.
- e. Explain about IPv6.
- f. Explain the working of RMON. Write 2 shortcomings of it.
- g. Explain about wireless transmission media.

Section (C)**Attempt any 3 questions.****(15 x****3 = 45)**

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| Q.3. | <ul style="list-style-type: none">a. What is a subnet? How it is created. How are private addresses used in subnet?b. How is an error corrected in data link layer? | 8
5 |
| Q.4. | <ul style="list-style-type: none">a. Write in detail about class full addressing. What is HDLC?b. Elaborate unipolar, polar and bipolar encoding in detail. | 8
7 |
| Q.5. | <ul style="list-style-type: none">a. Define Crossbar Switch. Why is it important?b. What is the purpose of WWW? How is FTP different from Telnet? | 8
7 |
| Q.6. | <ul style="list-style-type: none">a. Why do we need an ad hoc network? How does it differ from cellular networks.b. Explain Differentiated quality of service in detail. | 8
7 |
| Q.7. | <ul style="list-style-type: none">a. Why a sensor network may be required? Explain the requirement of Routing Protocols for sensor network.b. Reactive routing protocol is different from proactive routing protocol. Explain how. Give example of each type of protocol. | 8
7 |
