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| **ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27** | | | | | | |
| **B.C.A – IV SEMESTER** | | | | | | |
| **SEMESTER EXAMINATION: APRIL 2018** | | | | | | |
| **CA 4215- Computer Networks - I** | | | | | | |
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| **Time- 2 1/2 hrs** | |  | **Max Marks-70** | | |
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**I.Answer all the questions (10\*2=20)**

1. Define Networks. Mention the components of Computer Networks.
2. What is Transmission media? Mention its types.
3. Write about Satellite transmission.
4. Define error correction and detection.
5. What is MAC? Mention its sub layers.
6. Explain the importance of Ethernet.
7. Define Flooding.
8. What is Congestion Control?
9. Explain the importance of Transport layer.
10. Define WWW

**II.Answer any FIVE of the following (5\*6=30)**

1. Explain In detail about the categories of Networks.
2. Write is Transmission Media? Write in detail about Satellite Communication.
3. What is Flow control? How is Selective repeat better than Go back n?
4. Write in detail about IEEE 802.3
5. Explain the concept of Dijikstra’s shortest path routing algorithm with an example.
6. Write about the services offered by transport layer to upper layers.
7. Explain the concept of email in detail.

**III.Answer any TWO of the Following (2\*10=20)**

1. What is a topology? Explain various topologies with advantages and disadvantages.
2. What is CSMA? Explain in detail about its types.
3. Explain in detail about Token bucket congestion control algorithm in detail with a suitable diagram.