|  |
| --- |
| **Description: col LOGO outlineST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27****Date: 22-04-2019** |
| **BSc –VI SEMESTER** |
| **SEMESTER EXAMINATION: APRIL 2019** |
| **CS 6115- Computer Networks** |
| **Time- 2 1/2 hrs** |  |  **Max Marks-70** |
| **Supplementary candidates only.** |
| **This paper contains two printed pages and three parts** |

**PART A**

**Answer All the Questions. 10 \* 2=20**

1. Define Computer Network.
2. What is a topology? Mention its classification.
3. What are the different types of Multiplexing?
4. What is piggybacking?
5. Define Flow Control. What are the various methods available for flow control?
6. Define MAC.
7. What is Routing?
8. Mention any 2 functions of transport layer.
9. What is cryptography?
10. Mention any 2 application layer services in tcp/ip.

**PART B**

**Answer any FIVE. 5\*6=30**

1. Explain TCP/IP model with a neat diagram.
2. What is transmission media? Explain twisted pair with a diagram.
3. Explain stop and wait ARQ in error control.
4. Explain CSMA/CA with a neat diagram.
5. Where and how leaky bucket algorithm is used?
6. What are the services offered by transport layer?
7. Explain the concept of email with a neat diagram.

**PART C**

**Answer any TWO. 2\*10=20**

1. Define Switching. Explain circuit switching with a neat diagram.
2. Define Error detection. Find checksum at sender and receiver with the following example. The data sent is 100100 and the generator is 1101.
3. Explain Dijikstra’s shortest path algorithm with an example

**CS­-6115\_B\_19**