# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

# M.Sc. DEGREE EXAMINATION - COMPUTER SCIENCE

FIRSTSEMESTER – APRIL 2017

Section A

### 16PCS1MC05- ADVANCED COMPUTER NETWORKS

Date: 05-05-2017 Time: 09:00-12:00 Dept. No.

Max.: 100 Marks

| Answer All the questions                            | Section A                   | (10 X <b>2=20</b> ) |
|---|-----------------------------|---------------------|
| 1. What is multicasting ?                           |                             |                     |
| 2. What is NIST? Write down the usage of NI         | ST.                         |                     |
| 3. What is twisted pair?                            |                             |                     |
| 4. What is Teledesic?                               |                             |                     |
| 5. What is selective flooding?                      |                             |                     |
| 6. Define datagram.                                 |                             |                     |
| 7. What is TSAP and NSAP?                           |                             |                     |
| 8. What are the elements of transport protocol      | ?                           |                     |
| 9. Define silly window syndrome                     |                             |                     |
| 10. What is Adhoc network?                          |                             |                     |
| Anguna any Fixe questions                           | Section B                   | ( <b>5V 0</b> _40)  |
| Answer any Five questions                           |                             | (5X8=40)            |
| 11. a) Explain the protocol hierarchies.<br>(OR)    |                             |                     |
| b) Explain TCP reference model? How it c            | liffers from OSI model?     |                     |
| 12. a) Explain GEO satellites and its character     | ristics.                    |                     |
| b) Explain Microwave transmission in de             | tail.                       |                     |
| 13. a) Explain shortest path routing algorithm      | with example.               |                     |
| (OR)<br>b) Explain stop and wait protocol.          |                             |                     |
| 14. a) Explain the process of connection estab      | lishment in transport layer |                     |
| b) Explain crash recovery in client server          | communication.              |                     |
| 15 a) Explain the physical media which support (OR) | rt WLAN.                    |                     |
| b) Explain the architecture and the advanta         | ges of Bluetooth.           |                     |
|   |                             |                     |

#### Section C

# (2X20=40)

## Answer Any Two questions

- 16. (i) Write down the OSI reference model through the layered approach. Explain data link layer and Transport layer in detail.
  - (ii) Explain error correcting codes for single bit and burst errors..
- 17(i) Explain link state routing algorithm with example
  - (ii) Explain user datagram protocol in detail
- 18 (i) Explain Bluetooth network configuration and topologies.
  - (ii) Explain fiber optics cable and compare with copper wire.

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