Reg. No.

# Question Paper Code: 13290

M.E. DEGREE EXAMINATION, JANUARY 2015.

First Semester

Computer Science and Engineering

## CP 7101 – DESIGN AND MANAGEMENT OF COMPUTER NETWORKS

(Common to M.E. Computer Science and Engineering (with Specialization in Networks) and M.E. Biometrics and Cyber Security)

(Regulation 2013)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — 
$$(10 \times 2 = 20 \text{ marks})$$

- 1. Define Network Management.
- 2. What is network supportability?
- 3. How to gather network requirements?
- 4. What do you mean by flow prioritization?
- 5. How architectural mapping is done?
- 6. List any two examples for flow analysis?
- 7. Define addressing and routing.
- 8. What are types of privacy issues arise in networking environment?
- 9. Distinguish between tunneling and bridging.
- 10. Define packet sniffing.

PART B —  $(5 \times 16 = 80 \text{ marks})$ 

- 11.
- (a) (i) List out service characteristics and discuss about performance characteristics.
  - (ii) Based on what all perspectives the requirements differs? Explain for any two perspectives.

- (b) (i) In what way network requirements differ from other software project requirements.
  - (ii) Explain in detail about gathering requirements for any network Project of your own interest.
- 12. (a) (i) With neat diagram explain Requirement Analysis process.
  - (ii) How to develop Metric based service provider? Explain in detail about developing service metric.

#### Or

- (b) Discuss in detail about supplemental performance requirements.
- 13. (a) (i) Explain the reasons to care about network flows in routing.
  - (ii) Discuss about NetFlow and Flow Reporting

### Or

- (b) How to prioritize flow? Explain with flow specification Algorithm.
- 14. (a)
- (i) Why High-level messages are encapsulated inside the low-level messages? Explain.
- (ii) Explain three way handshake protocols in security mechanisms

#### Or

- (b) Discuss about client/server program that uses the socket Interface to send messages over TCP connection
- 15. (a)
- (i) In routing discuss about Split Connection Approach?
  - (ii) How Channel Mapping can be established for Enterprise network?

Or

- (b) (i) In routing Architecture bring the importance of Bridges and LAN Switches.
  - (ii) List and Explain the Limitations of Bridges.