M.TECH. DEGREE EXAMINATION
Model Question Paper - I
First Semester
Branch: Information Technology
Specialization: Network Engineering

MITNE 106-1 PROTOCOL ENGINEERING

(Regular – 2013 Admission onwards)

Time: Three hours   **Maximum:** 100 Marks

1. a. Discuss briefly following terms   (15 marks)

    i.   Communication model

    ii.   Communication Software

    iii.   Communication Protocol

  b. Explain the various Protocol development methods.   (10 marks)

OR

2. a. Describe the various Application Protocols.   (15 marks)

    b. Explain the functions of each layer in ISO-OSI reference model.   (10 marks)

3. a. Explain the salient features of SDL.   (15 marks)

    b. What is X-on-X-off protocol?   (10 marks)

OR

4. a. Describe RSVP specifications.   (8 marks)

   b. Explain the Sliding window protocol specifications.   (9 marks)

   c. What is OSPF? Explain.   (8 marks)

5. a. How the protocol verification differs from protocol validation?   (10 marks)

   b. What is deadlock? Explain.   (15 marks)

OR

6. a. Discuss the various protocol validation approaches. (15 marks)

    b. Explain about SDL based protocol verification. (10 marks)

7. a. What is Tree and Tabular Combined Notation (TTCN)? (7 marks)

   b. Discuss the various conformance testing methodologies. (10 marks)

   c. Explain about QoS test architecture. (8 marks)

OR

8. a. Explain about various Test Sequence Generation Methods. (15 marks)

   b. Describe Objects Based Approach To Protocol Implementation. (10 marks)