7. What is an Intrusion Prevention System ? Discuss its limitations. Explain the main functions of a Network IPS.

8. Explain the design requirements and design elements for security .

M.Sc. Information Technology 4th Semester
NETWORK SECURITY
Paper: MIT-402

Time Allowed—2 Hours]   [Maximum Marks—100

Note :— There are **eight** questions of equal marks. Candidates are required to attempt any **four** questions.

1. What is the meaning of the term "defence in depth" ? How is it realized in computer networks ?

2. Write short notes on:

   (a) TCP's three way handshake

   (b) CISCO router as a packet filter.

3. Explain the concept of state in the context of a firewall? How does a stateful firewall work ?

4. What is a proxy firewall ? What are its various types ? Explain the pros and cons of proxy firewalls.

5. How is a host machine protected from malicious programs?

6. What is a security policy ? How is it developed and implemented ?