

# **ITM SLS Baroda University**

## **SOCSET ASSIGNMENT**

### **CN Sem 4**

**Assigned Dt: 26:03:2025**

**Submission Dt: 01:04:2025**

1. Define the Domain Name System (DNS). Why is it needed?
2. What is DNS caching? How does it help improve DNS query performance?
3. Differentiate between Generic Top-Level Domains (gTLDs) and Country-Code Top-Level Domains (ccTLDs). Provide examples.
4. What are domains and sub-domains? Give examples to illustrate the difference.
5. Explain the hierarchical structure of the DNS database.
6. What are DNS resource records? Name and explain any four types of DNS records.
7. What is the purpose of an email User Agent (UA)? Give examples.
8. Describe the role of a Message Transfer Agent (MTA) and a Message Access Agent (MAA).
9. Differentiate between Web Mail and Non-Web Mail with suitable examples.
10. Explain the difference between SMTP, POP3, and IMAP email protocols.
11. Define HTTP and explain its importance in web communication.
12. What is the difference between persistent and non-persistent HTTP connections?
13. Explain the structure of an HTTP request and response message.
14. How are HTTP, HTML, and URLs related to each other?
15. Differentiate between static and dynamic websites with examples.
16. What is client-side scripting? Provide examples of languages used for client-side scripting.
17. What is server-side scripting? How is it different from client-side scripting?
18. Discuss the working of the Simple Mail Transfer Protocol (SMTP) with the help of a diagram.
19. Compare and contrast POP3 and IMAP. Which one is more suitable for mobile users and why?
20. Create a flowchart or diagram explaining how HTTP request-response cycles work when a user visits a website.

