

**Tribhuvan University
Institute of Science and Technology
2069**

Bachelor Level/ Fourth Year/ Seventh Semester/ Science
Computer Science and Information Technology (CSc-407)
(Network and System Administration)
Full Marks: 60 | Pass Marks: 24 | Time: 3 hours.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all questions.

1. a) Explain the Reference Model.
b) What do you mean by switching and routing? Explain the routing algorithm.
2. a) Explain the job scheduling with cron.
b) Explain the network interface configuration.
3. a) How can you diagnose network startup problem? Explain.
b) How can you use network troubleshooting command? Explain.
4. a) Differentiate between IPV4 and IPV6 addressing.
b) Explain the dynamic host configuration protocol (DHCP) principle.
5. a) What do you mean by primary and slave name server? Explain.
b) Explain the DNS and its principles.
6. a) What do you mean by primary and slave name server? Explain.
b) Explain the DNS and its principles.
7. a) Explain the configuration process of HTTP server.
b) Explain the proxy-authentication mechanisms.