

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

**2069**

Bachelor Level/ Fourth Year/ Seven Semester/ Science  
Computer Science and Information Technology (CSC-407)  
(Network and System Administration)  
(NEW COURSE)

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 the 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.
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b) Explain the DNS and its principles.
- 7.a) Explain the configuration process of HTTP server.  
b) Explain the proxy-authentication mechanisms.

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