

Tribuvan University

**Institute of Science and Technology
2069**

Bachelor Level/ Third Year/ Fifth Semester/
Science **Computer Science and Information
Technology (CSc. 301)** (Computer Networks)

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.

Group A

Long Answer Questions:

Attempt all questions: (2x10=20)

1. What are the seven layers of OSI model? Comparison between these seven layers.

OR

What do you mean by routing? Differentiate between Non-adaptive algorithm and adaptive algorithm.

2. Explain the congestion control algorithm with example

Group B

Short Answer Questions

Attempt any eight: (8x5=40)

1. What do you mean by internet protocol stack?
2. Differentiate between DNS records and DNS messages.
3. Explain the pipelined reliable data transfer protocol.
4. Explain network service model.
5. Explain IPV4 addressing.
6. What do you mean by network address translator?
7. Explain on ALOHA and slotted ALOHA protocols.
8. What are the various applications of multimedia networking?
9. Explain the network management architecture with suitable diagram.