



**Tribhuvan University
Institute of Science and Technology
2073**

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 answer in their own words as far as practicable.
Attempt all the questions.

Group 'A'
Long answer questions
Attempt all questions. (2 x 10 = 20)

- 1.) Explain the seven layers of OST model and compare between them.

OR

What do you mean by link state routing algorithm? Differentiate between IPv4 and IPv6.

- 2.) Explain the purpose of subnet ting and also explain the subnet mark.

Group 'B'
Short Answer Questions
Attempt any eight questions. (8 x 5 =40)

- 3.) Explain the responsibilities of data link layer is the internet model.
- 4.) What do you mean by TCP push operation?
- 5.) Explain the Internet Control Message Protocol (ICMP).
- 6.) Explain the point to point protocol (PPP) with example.
- 7.) Write down the techniques used in 802.12 protocol for wireless networks?
- 8.) Differentiate between ALOHA and slotted ALOHA protocols.
- 9.) Discuss the idea used in public key encryption system.
- 10.) What are the applications of multimedia networking?
- 11.) Mention the intra structure for network management.