Tribuvan University

Institute of Science and Technology 2068

Full Marks: 60

Pass Marks: 24

Time: 3 hours

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

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

Attempt all questions: (2x10=20)

1. Explain the OSI reference model?

OR

What do you mean by TCP? Explain the TCP structure?

2. Define DNS. Explain the DNS records and DNS messages.

Group B Short Answer Questions

Attempt any eight: (8x5=40)

- 1. What do you mean by Internet Protocol stack?
- 2. Differentiate between transport layer and network layer.
- 3. Explain the principle of congestion control.
- 4. What do you mean by IP datagram fragmentation?
- 5. Explain the point to point protocol (PPP).
- 6. What do you mean by multicasting routing?
- 7. Explain the Internet Control Message Protocol (ICMP).
- 8. What are the various types of multimedia networking application?
- 9. What types of intra structure is needed for network management?

Short Answer Questions:

(8x5=40)

Attempt any eight:

What do you mean by Internet Protocol stack?

Differentiate between transport layer and network layer.

Explain the principle of congestion control.

What do you mean by IP datagram fragmentation?

Explain the point to point protocol (PPP).

What do you mean by multicasting routing?

Explain the Internet Control Message Protocol (ICMP).

What are the various types of multimedia networking application?

What types of intra structure is needed for network management?