

**Tribhuvan University**  
**Institute of Science and Technology**  
2074

Bachelor Level / seventh-semester / Science

**Computer Science and Information Technology(O-CSC402)**

(Internet Technology (old syllabus))

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

The figures in the margin indicate full marks.

Full marks: 60

Pass marks: 24

Time: 3 hours

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**Attempt all questions.**

1. What are teleports and terrestrial links? What are the components of satellite communication? (3+3)
  
2. In internet protocol suite, what are the basic functions performed by the Internet Protocol? Discuss about the TCP header structure. (2+4)
  
3. What are the advantages of using tiered technology? Describe the possible data transfer modes that FTP can use. (3+3)
  
4. How universal naming is done with URI? Given a URI string "foo://password@username.com/index.php?type=suer#test".Now, identify schema name, hierarchical part, query, and fragment in the string. (2+4)
  
5. How XMLHttpRequest sends a request to a server? How responseText property differs from response XML. (3+3)
  
6. What are the proxy servers? Differentiate each of open, forward and reverse proxy servers. (1+5)
  
7. What is the role of Mail User Agent (MUA) in mail servers? How webmail differ from POP 3 mails. (3+3)
  
8. What is the use of proxy arrays in load balancing? Discuss about the load balancing approaches. (1+5)
  
9. Describe the key features of e-commerce over traditional commerce?(6)
  
10. What do you mean by multimedia broadcasting? How Gopher differs from HTTP? (3+3)