Tribhuwan University
Institute of Science and Technology
Model Question

Bachelor Level / first-semester / Science   Full marks: 60
Computer Science and Information Technology(CSC109)   Pass marks: 24
(Introduction to Information Technology) 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.

Section A

Attempt any two questions.(2 x 10 = 20)

1. What is operating system? Discuss different functions of operating system in detail.(2 + 8)

2. Why do we need computer network? Discuss different types of network topologies along with their merits and demerits.(3+7)

3. What are the benefits of storing data using databases? Discuss three levels of database system architecture in detail.(3+7)

Section B

Attempt any eight questions.(8x5=40)

4. Discuss characteristics of third generation of computers. Compare it with fourth generation.(3+2)

5. Discuss the components of CPU in brief.(5)

6. What is primary memory? Discuss different types of primary memory.(1+4)

7. Define hard-copy and soft-copy output. Differentiate between impact and non-impact printers with example.(2+3)

9. Define IP address with example. What are the benefits of using domain name?(2+3)

10. What are the characteristics of multimedia? Discuss.(5)

11. Define cryptography. Discuss public key cryptography in detail.(1+4)

12. Write short notes on:(2 x 2. 5 = 5)
     a. BigData
     b. E-governance