Tribhuvan University

Institute of Science and Technology

2065

Bachelor Level/ First Year/ First Semester/ Science — Full Marks: 60

Computer Science and Information Technology (CSc. 101) — Pass Marks: 24

(Introduction to Information Technology) — Time: 3 hours.

Candidates are required to give their answers in their own words as for as practicable.
The figures in the margin indicate full marks.

1. **Long Questions:**

Attempt any two questions: (2 × 10=20)

1..1. Explain the major functions of a digital computers.

1..2. Explain the first, second and third normal form and compare it.

1..3. What do you mean by Intranet? Explain the advantage and disadvantage of Intranet.

2. **Short Questions:** (8 × 5=40)

Attempt any eight questions:

2.1. What do you mean by the speed of a computer?

2.2. What do you mean by super computer?

2.3. What is an auxiliary storage device?

2.4. What are the different types of software?

2.5. What do you mean by multitasking?

2.6. Differentiate between high level language and low level language.

2.7. What are the advantages of using database?

2.8. What are the different types of network architecture?

2.9. How can you define the addresses on the Internet?

2.10. What are the components of a data ware house?

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Candidates are required to give their answers in their own words as for as practicable.
The figures in the margin indicate full marks.

Long Questions:

Attempt any two questions: (2 × 10=20)

1. Explain the CPU and its working principle.
2. Explain how a distributed data processing system works.
3. Explain the network topology. What are the different types of network topologies?

Short Questions: (8 × 5=40)

Attempt any eight questions:

4. What are the different kinds of output devices?
5. What is an application software?
6. What is the advantage of graphical user interface (GUI)?
7. What do you mean by multitasking?
8. Differentiate between Compilers and Interpreters.
9. What do you mean by HTTP and how does it works?
10. What are the components of a data ware house?
11. Explain the different types of computer network.
12. Describe the communication processor.
13. What are the major disadvantages of distributed data processing?

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2067

Bachelor Level/ First Year/ First Semester/ Science — Full Marks: 60

Computer Science and Information Technology (CSc. 101) — Pass Marks: 24

(Introduction to Information Technology) — Time: 3 hours.

Candidates are required to give their answers in their own words as for as practicable.
The figures in the margin indicate full marks.

Long Questions:

Attempt any two questions: (2 × 10=20)

1. What do you mean by Internet? Explain the advantages and disadvantages of Internet.
2. Explain the functions of an operating system.
3. What are the major characteristics of computer? Explain.

Short Questions: (8 × 5=40)

Attempt any eight questions:

4. What is the function of memory?
5. Describe the working principle of processor.
6. Differentiate between random access devices and sequential access device.
7. What are the different kinds of input devices?
8. What is system software?
9. What do you mean by multiprocessing?
10. Differentiate between third generation languages and fourth generation languages.
11. What do you mean by normalization?
12. What do you mean by TCP/IP and how does it work?
13. What are the major characteristics of the Intranet?

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2068

Bachelor Level/ First Year/ First Semester/ Science — Full Marks: 60

Computer Science and Information Technology (CSc. 101) — Pass Marks: 24

(Introduction to Information Technology) — Time: 3 hours.

Candidates are required to give their answers in their own words as for as practicable.
The figures in the margin indicate full marks.

Long Questions:

Attempt any two questions: (2 × 10=20)

1. Explain how the CPU and memory work with suitable diagram. Compare between CISC and RISC architecture in brief.
2. Differentiate between centralized Data processing system and Distributed Data Processing System. State advantages and disadvantages of distributed systems.
3. Explain about Internet and Intranet. List some activities that you can do on Internet. Describe, how the World Wide Web is different from the Internet?

Short Questions: (8 × 5=40)

Attempt any eight questions:

4. Distinguish among the four kinds of computer systems.
5. Define RAM, ROM, PROM, EPROM.
6. What are the features of today's software applications? Explain.
7. What is the difference between sequential and direct-access file processing?
8. Explain the meaning of up-link, down-link and cross-link.
9. How will you compose, reply and forward an e-mail message?
10. What is GIS? What are the components of GIS? How GIS works?
11. Explain CAD/CAM system.
12. Highlight on computers in Education and training in brief.
13. Write short notes on **(any two):**
    a) Compiler and interpreters
    b) MICR, OCR and OMR
    c) Data Normalization