

FAR WESTERN UNIVERSITY
Semester End Examination-2081
Information Technology Fundamentals (CSIT.112)

Faculty: Science and Technology (CSIT)

Level: Undergraduate

Semester: First

Full Marks: 100

Time: 3hrs.

*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 (Very short answer questions)

8×3 = 24

1. Explain ASCII code.
2. Differentiate between static and dynamic RAMs.
3. Convert $(2B.DB)_{16}$ into octal number system.
4. Define data files.
5. Define database. What are the benefits of using databases?
6. What is cache memory? How it is different from register?
7. Why do you use search engines?
8. State and prove De-Morgan's theorem.

Group – 'B'

Attempt any five questions. (Short answer questions)

5×8=40

9. What are the main features and examples of fourth generation computers?
10. Define decimal number system. Subtract $(567)_{10}$ from $(68)_{10}$ by using 9's and 10's complement method.
11. Explain half adder and full adder circuit with logical expression and truth table.
12. Explain classification of computers on the basis of size with examples.
13. What is programming language? Describe the various types of programming languages.
14. Write short notes on: (any two)
 - a. Modem
 - b. Non- impact printer
 - c. Internet service provider

P.T.O.

Group – 'C'

Attempt any three questions. (Long answer questions)

3×12 = 36

15. Classify the operating system into different types based on their processing capability. List the main function of the operating system and describe in details.
16. What is Boolean algebra? Describe any five logic gates with truth tables and logical symbols.
17. Compare system software with application software. Explain different types of software in brief.
18. Explain the concept of computer networks. Discuss the importance of networking in computer systems. Differentiate between LAN and WAN network.
