

End Term Examination

FIRST Semester [BCA] January 2024

Paper Code: BCA-105

SUBJECT: Fundamentals of Computers & IT

Maximum Marks: 60

Time: 3 Hours

Note: Attempt five questions in all including Q.No.1 which is compulsory. Select one question from each unit.

Q1 Answer any Five of the following: (5x4=20)

- a) Explain the block diagram of a computer and its components. Discuss their functioning in details
- b) Differentiate between Impact and Non-Impact Printers
- c) Distinguish between Loader and Linker
- d) Explain transmission modes.
- e) Describe ASCII and EBCDIC Codes
- f) Briefly describe different types of network

Unit-I

- Q2 a) Define Computers and its features. (5)
- b) Explain Classification of Computers with example. (5)

OR

- Q3 a) Define memory. Distinguish between Primary and Secondary Memory. (5)

- b) Explain input and Output devices and give three examples of each input and output device. (5)

Unit-II

- Q4 a) Define the Operating System. Explain the functions of the Operating System. (5)

- b) Describe the Booting Process in the Operating System. (5)

OR

- Q5 a) Explain types of Operating Systems. (5)

- b) Differentiate between Low-Level Languages and High-Level Languages. (5)

OR

- c) Differentiate between Compiler and Interpreter. (5)

Unit-III

- Q6 a) Write base values of binary, octal, decimal, and hexadecimal Number systems. (2)

- b) Convert the following binary numbers to octal and hexadecimal Numbers (8)

- (i) 1110001000
- (ii) 1010100
- (iii) 11001010
- (iv) 10101001

OR

- Q7 a) Distinguish between 1's complement and 2's complement. (2)

- b) Perform binary Addition on the following: (2)

- (i) (14)+(12)
- (ii) (16)+(5)

- c) Convert Decimal to binary, octal, and hexadecimal. (6)

- (i) (457)₁₀
- (ii) (10.75)₁₀

Unit-IV

- Q8 a) Explain various Network Topologies with Advantages and Disadvantages (5)

- b) Describe the Internet and its uses. How internet is different from Intranet? (5)

OR

- Q9 a) Define Transmission Media. (4)

- b) Write short notes on the following: (Any three) (6)

- (i) IoT
- (ii) Cloud Computing
- (iii) Domain Name
- (iv) Client-Server Model
- (v) Protocols- FTP, HTTP, SMTP

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