

# End Term Examination

FIRST Semester [BCA] January 2024

Paper Code: BCA-105

SUBJECT: Fundamentals of Computers  
& IT

Time: 3 Hours

Maximum Marks: 60

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)

- Explain the block diagram of a computer and its components. Discuss their functioning in details
- Differentiate between Impact and Non-Impact Printers
- Distinguish between Loader and Linker
- Explain transmission modes.
- Describe ASCII and EBCDIC Codes
- 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)
- 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)

- 1110001000
- 1010100
- 11001010
- 10101001

## OR

- Q7 a) Distinguish between 1's compliment and 2's complement. (2)
- b) Perform binary Addition on the following: (2)
- $(14) + (12)$
  - $(16) + (5)$
- c) Convert Decimal to binary, octal, and hexadecimal. (6)
- $(457)_{10}$
  - $(10.75)_{10}$

## 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)
- IoT
  - Cloud Computing
  - Domain Name
  - Client-Server Model
  - Protocols- FTP, HTTP, SMTP

\*\*\*\*\*

BCA-105  
P<sub>1/2</sub>BCA-105  
P<sub>2/2</sub>