

H Roll No. ....

## TBC-102/TBI-102

B. C. A./B. Sc. (IT)  
(FIRST SEMESTER) MID SEMESTER  
EXAMINATION, Nov., 2022

COMPUTER FUNDAMENTALS AND  
INFORMATION TECHNOLOGY

Time : 1½ Hours

Maximum Marks : 50

Note : (i) Answer all the questions by choosing  
any *one* of the sub-questions.

(ii) Each sub-question carries 10 marks.

1. (a) Discuss Computer and their characteristics  
in detail. (CO1)

OR

(b) What is the need of computer system in  
our day-to-day life ? Explain any *five*  
applications of computer. (CO1)

P. T. O.

(2) TBC-102/TBI-102

2. (a) Draw the block diagram of computer and explain various components of computer system. (CO1)

OR

- (b) Explain all the five generations of computer with advantages and disadvantages of each generation. (CO1)

3. (a) Differentiate between the following : (CO1, CO2)

- (i) System software and Application software
- (ii) Hardware and Software

OR

- (b) Discuss classification of computers according to Size, Type and Purpose in detail. (CO1, CO2)
4. (a) Discuss various types of Printers and monitors in detail. (CO2)

(3)

OR

- (b) Discuss Memory Hierarchy with the help of triangle diagram. Explain the types of RAM and ROM in detail. (CO2)
5. (a) Perform the following conversions : (CO2)
- (i)  $(7986)_{10} \rightarrow ( )_8$
  - (ii)  $(76422)_8 \rightarrow ( )_{16}$
  - (iii)  $(DA4EC)_{16} \rightarrow ( )_{10}$
  - (iv)  $(1011110111001)_2 \rightarrow ( )_{10}$
  - (v)  $(98768)_{10} \rightarrow ( )_2$

OR

- (b) Write down the Binary Code and Gray Code equivalent of the following Decimal numbers : (CO2)
- 11, 12, 13, 14, 15