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Roll No.

TBC-101/TBI-101

B. C. A./B. SC. (IT)

(FIRST SEMESTER) MID SEMESTER

EXAMINATION, Jan., 2023

PROGRAMMING CONCEPTS USING

C LANGUAGE

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) What is algorithm ? How is algorithm differing from pseudo code ? Write an algorithm to interchange two numbers without using third number. (CO1)

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(2) TBC-101/TBI-101

OR

(b) Explain the following : (CO1)

(i) Top Down and Bottom Up programming approach

(ii) History of C language

2. (a) What is Flowchart .Explain its different symbols. What are the advantages and limitations of flowchart ? (CO1)

OR

(b) Write an algorithm and draw the flowchart to check whether any number is palindrome or not. (CO1)

3. (a) Explain Different data types with example. (CO1)

OR

(b) Write a program to print reverse of any number. (CO1)

(3)

4. (a) What is operator ? Explain logical operators and relation operators with example. (CO2)

OR

- (b) Explain operator precedence and associativity with example. (CO2)

5. (a) Explain Switch case statements with examples. (CO2)

OR

- (b) Explain the following : (CO2)

(i) While loop, for loop and do-while loop

(ii) Goto and continue statement.

(iii) Break and continue statements