1811000101040001
B. C. A F.Y. (Semester-I)
Examination December-2023
Computer programming & programming methodology

Seat No:

Student's Signature

[**Time: Three hours**]   [**Max. Marks: 70**]

Instructions: 1. All questions are compulsory.
2. Figure to the right indicate full marks.
3. Mention your options clearly.

Q.1   Answer following questions (Any 10)   **10**

1. Output of the compiler is represented as
   (A) Program (B) Object Code (C) Source Code (D) Algorithm

2. Which one is not a type of assignment operator?
   (A) += (B) == (C) *= (D) /=

3. Which function is used to copy string?
   (A) strcpy() (B) strcopy() (C) strcat() (D) strjoin()

4. Which type of operators are used to combine Multiple conditions?
   (A) Relational (B) Logical (C) Bitwise (D) Arithmetic

5. Which loop is executed at least once even if the condition is false?
   (A) For (B) while (C) do-while (D) None

6. What is the value of p at last, when the program will run?
   for(p=0; p<5;p++){ }
   (A) 5   (B) 4   (C) 0 (D) 1

7. In single dimensional array of size 20, what is the index of last element?
   (A) 20   (B) 19 (C) 0 (D) None

8. & is known as --------- operator
   (A) Relational (B) Arithmetic (C) Logical (D) Address

9. The output of 3+5*2 is
   (A) 8 (B) 13 (C) 16 (D) 11

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10. One if condition is written within another if condition is known as
   (A) Nested IF (B) Simple IF (C) IF-ELSE (D) None of above

11. What is the use of "\n"?
   (A) Tab (B) Null (C) New line (D) None of above

12. To skip remaining statements and go to next iteration in a loop, we use
   (A) break (B) goto (C) continue (D) return

Q.2 Answer following questions (Any three)   **18**
1. Define Algorithm and Flowchart. Also explain different symbols of flowchart.
2. What is variable and constant? Also explain datatypes available in C.
3. Explain relational operators and assignment operators.
4. Explain switch case with example.

Q.3 Answer following questions (Any three)   **18**
1. Explain different sections for writing a C program.
2. Explain input statements in detail.
3. Explain math functions with example.
4. Write a note on One dimensional array with example.

Q.4 Answer following questions (Any three)   **18**
1. Write a note on "Pointer".
2. Explain Linear search.
3. Write a note on Sorting array in ascending order.
4. Give difference of following:
   a) Compiler & Interpreter
   b) Array & Pointer

Q.5 Do as directed. (Any one)   **06**
1. Write a program to calculate sum of digits of given number.
2. Write a program to display whether given number is prime or not.

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