

Dr. Babasaheb Ambedkar Open University
Term End Examination July – 2026

Course	: BSCIT	Date	: 17/07/2026
Subject Code	: BSCIT-102	Time	: 11:30am to 01:45pm
Subject Name	: Introduction to Programming using C	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three)

(30)

1. Explain constants, variables and data types in C. Discuss different types of constants and rules for declaring variables.
2. Explain decision-making statements in C.
3. Discuss string declaration, initialization and commonly used string handling functions with examples.
4. Explain structures and unions in C.
5. Explain pointers and file handling in C.

Section B

Answer the following (Attempt any four)

(20)

1. Explain arithmetic, relational and logical operators in C.
2. Differentiate between Compiler and Interpreter.
3. Explain formatted input and formatted output functions in C.
4. Explain recursion and state its advantages and disadvantages.
5. Differentiate between call by value and call by reference.
6. Write a short note on dynamic memory allocation functions.

Section C

Part – A (Multiple Choice Questions)

(10)

Q.1 Which symbol is used to terminate a C statement?

- A) : B) ;
C) , D) .

Q.2 Which operator returns the remainder after division?

- A) / B) %
C) * D) +

Q.3 Which statement is mainly used for multiple-choice selection?

- [illegible]

Q.4 Which function reads formatted input from the keyboard?

- A) printf() B) gets()
C) scanf() D) puts()

Q.5 Which library function copies one string into another?

- A) strcmp() B) strlen()
C) strcpy() D) strcat()

Q.6 Which keyword is used to define a union?

- A) class B) union
C) struct D) enum

Q.7 Which function moves the file pointer to a specified location?

- A) fclose() B) fseek()
- C) fread() D) fopen()

Q.8 Which pointer value indicates that the pointer does not point to any valid memory location?

- A) void B) NULL
- C) Zero Pointer D) Empty

Q.9 Which memory allocation function initializes allocated memory to zero?

- A) malloc() B) realloc()
- C) calloc() D) free()

Q.10 Which storage class allows a variable to be shared among multiple source files?

- A) auto B) register
- C) static D) extern

Part – B (State whether the following statements are true or false)

(10)

- 1 A variable name can begin with an underscore (_).
- 2 The switch statement can be used as an alternative to multiple if-else statements.
- 3 The % operator can be used with floating-point operands.
- 4 strcpy() copies one string into another.
- 5 Structures and unions are user-defined data types.
- 6 malloc() allocates memory dynamically.
- 7 extern variables can be accessed from multiple source files.
- 8 fseek() changes the current position of the file pointer.
- 9 Call by reference allows a function to modify the original variable.
- 10 Pointer arithmetic can be performed on pointer variables.
