

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

Course	: BCA	Date	: 21-Feb-26
Subject Code	: BCAN-302(NEW)	Time	: 11:30am to 01.45pm
Subject Name	: Programming Principle & Algorithm	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Write the qualities of Identifiers in C.
2. Explain Pre-processor directives with examples.
3. Write down basic types of function. Give features about arguments having no return value.
4. Write short note on Pascal Triangle.
5. Write short note on Reverse Number.

Section B

Answer the following (Attempt any four) (20)

1. What are the features of C Tokens?
2. How will you declare a structure variable in C?
3. Write the syntax of if...else statement?
4. What is a non-null value?
5. Give some examples on loop control statements in C.
6. What is pseudo-code?

Section C

Part – A (Multiple Choice Questions) (10)

- 1 A function that calls itself for its processing is known as
A Inline Function B Overloaded Function
C Nested Function D Recursive Function
- 2 Which among the following shows a variable size datatype?
A struct B int
C float D double
- 3 Which among the following are unary operators?
A sizeof B ++
C - D allofthese
- 4 _____ keyword is used to declare the header file
A include B string
C exclude D namespace
- 5 _____ will not be examined with switch case statement.
A enum B float
C character D Integer

- 6 When a function is recursively called, then all the automatic variables are kept in
A stack B queue
C array D register
- 7 What is the correct parameter passing?
A Call by Reference B Call by Value
C Both a and b D Neither a nor b
- 8 Which among the following is a step-by-step procedure for calculations?
A Program B Algorithm
C Greedy Method D Problem
- 9 The value of 6! is
A 540 B 720
C 120 D 340
- 10 What is the correct formula of finding sum of first n numbers?
A $(n+1)/2$ B $n(n)/2$
C $n(n+2)/2$ D $n(n+1)/2$

Part – B (Do as Directed)

(10)

- 1 Who is the founder of C language?
- 2 Write down any one method of comment in C.
- 3 Why we are using \t in C?
- 4 What is operator?
- 5 Why we use function strlen?
- 6 What is unary operator?
- 7 What is return keyword?
- 8 What is block?
- 9 Why we use arrow symbol in flowchart?
- 10 What is Big O notation?
