

USN

Course Code 1BPLC105/205E

First / Second Semester B.E. Degree Examinations, July 2026

INTRODUCTION TO C PROGRAMMING

Duration: 3 hrs

Max. Marks: 100

Note: 1. Answer any FIVE full questions choosing ONE Full Question from each Module
 2. Missing data, if any, may be suitably assumed

<u>Q. No</u>	<u>Question</u>	<u>Marks</u>	<u>(RBTL:CO: PI)</u>
<u>Module-1</u>			
1.	a. Write a short note on history of C programming.	06	(2 :1: 2.1.1)
	b. Describe the structure of C program and explain in detail.	06	(2 :1: 1.3.1)
	c. Explain the process of compiling and executing of C program.	08	(3 :1: 2.1.2)
(OR)			
2.	a. Explain with syntax the scanf() statement for various datatypes.	06	(2 :1: 1.3.1)
	b. Define the following terms in C programming (i) Keyword (ii) Constant (iii) Variable	06	(1 :1: 2.1.1)
	c. Write the printf statement for the following outputs: (i) Welcome to BITM (ii) Welcome to "BITM" (iii) 24.555->24.55 (iv) Welcome to BITM Ballari	08	(2 :1: 2.1.2)
<u>Module-2</u>			
3.	a. List operators in C. Discuss any three operators in detail.	06	(2 :2: 2.2.3)
	b. Write a program to find the given number is Even or Odd.	06	(2 :2: 2.2.3)
	c. List the different operators in C. Explain any 3 operators with example.	08	(2 :2: 1.3.1)
(OR)			
4.	a. Write a program to input week number (1-7) and print day of a week name by using switch case statement.	06	(2 :2: 2.2.3)
	b. Explain while statement with its syntax, flowchart and an example.	06	(2 :2: 1.3.1)
	c. Compare While and Do-while statements in C.	08	(2 :2: 2.2.3)
<u>Module-3</u>			
5.	a. Explain declaration and initialization of a 1D-array with an example.	06	(2 :3: 2.1.1)
	b. Write a C program to print of the smallest number in an array.	06	(2 :3: 2.2.3)
	c. Write a C program to read two matrices of size 3×3 and display addition of two matrices.	08	(2 :3: 2.2.3)

(OR)

- | | | | | |
|----|----|---|----|---------------|
| 6. | a. | Explain how declaration and initialization of a strings with an example. | 06 | (2 :3: 2.1.1) |
| | b. | Explain the following string handling functions.
(i) strcat (ii) strcpy (iii) strlen | 06 | (2 :3: 1.3.1) |
| | c. | Develop a program to concatenate two strings, find length of a string and copy one string to other using string operations. | 08 | (2 :3: 2.2.3) |

Module-4

- | | | | | |
|----|----|--|----|---------------|
| 7. | a. | What is function and explain the need of a function. | 06 | (2 :4: 2.1.1) |
| | b. | Write a program to swap two values using call by value. | 06 | (2 :4: 2.1.1) |
| | c. | Explain the three elements of user defined function in detail. | 08 | (2 :4: 2.1.1) |

(OR)

- | | | | | |
|----|----|--|----|---------------|
| 8. | a. | Write a recursive function to calculate the factorial of a number. | 06 | (2 :4: 2.1.1) |
| | b. | Explain nesting of a functions with an example. | 06 | (2 :4: 2.1.2) |
| | c. | List the different categories of functions and explain each categories in detail with example. | 08 | (2 :4: 2.1.3) |

Module-5

- | | | | | |
|----|----|--|----|---------------|
| 9. | a. | Define structure and explain how defining and declaring structure with example. | 10 | (2 :5: 2.1.2) |
| | b. | Develop a program to declare the structure of employees and display the employee records with higher salary among two employees. | 10 | (2 :5: 2.2.3) |

(OR)

- | | | | | |
|-----|----|---|----|---------------|
| 10. | a. | Define pointer and explain how declaration and initialization of a pointer variable with example. | 10 | (2 :5: 2.1.2) |
| | b. | Develop a program to add two numbers using pointers to variables. | 10 | (2 :5: 2.2.3) |

** ** *