

Basavarajeswari Group of Institutions
BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT
 (Autonomous Institute under Visvesvaraya Technological University, Belagavi)

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Course Code

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First Semester B.E. Degree Examinations, February 2025

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. Define computer. Explain briefly the characteristics of computer.	06	(2:1:2.6.2)
	b. What is programming paradigm? Explain imperative and declarative programming paradigm.	06	(2:1:2.6.2)
	c. Describe the classification of input and output devices of a computer. Explain each briefly.	08	(2:1:2.6.2)
(OR)			
2.	a. What is an identifier? Discuss the rules to form identifier names.	06	(2:1:2.6.2)
	b. List and explain different types of files used in C program.	06	(2:1:2.6.2)
	c. Explain the structure of C program with an example for each section.	08	(2:1:2.6.2)
<u>Module-2</u>			
3.	a. Interpret the different types of errors in C program.	06	(2:2:2.6.2)
	b. Write a C program to find the largest of three numbers using ternary operator.	06	(2:2:3.6.2)
	c. Explain any five C operators with examples.	08	(2:2:2.6.2)
(OR)			
4.	a. Write a C program to print the following pattern using nested for loop. 1 12 123 1234 12345	06	(3:2:3.6.2)
	b. Write a C program that accepts number from 1 to 10. Print whether the number is even or odd using switch case construct.	06	(3:2:3.6.2)
	c. List the different types of looping statements and interpret entry controlled looping statements with flow chart and syntax.	08	(2:2:3.6.2)
<u>Module-3</u>			
5.	a. Distinguish between built-in functions and user defined functions.	06	(2:3:2.6.2)

- b. Develop C program to add two integers using functions. 06 (3:3:3.6.2)
- c. Explain the components of function with suitable syntax and example for each. 08 (2:3:2.6.2)

(OR)

- 6. a. Write a note on scope of variables used in C language. 06 (2:3:2.6.2)
- b. Distinguish between actual parameters and formal parameters with examples. 06 (2:3:3.6.2)
- c. Develop a C program to swap two numbers using call by value and call by reference technique. 08 (3:3:3.6.2)

Module-4

- 7. a. What is an array? Explain with examples how to declare and initialize a 1-D array. 06 (2:4:3.6.2)
- b. Explain the concept of passing 2D arrays to functions with example program. 06 (2:4:3.6.2)
- c. Write a C program to find the transpose of a 3*3 matrix. 08 (3:4:2.6.2)

(OR)

- 8. a. List the operations that could be performed on arrays. Explain any two in brief. 06 (2:4:2.6.2)
- b. Write a short note on multi-dimensional arrays. 06 (2:4:2.6.2)
- c. Develop a C program to enter 'n' numbers in an array and sort an array in ascending order using Bubble Sort technique. 08 (3:4:2.6.2)

Module-5

- 9. a. What are strings and explain different functions for reading of strings with example. 06 (2:5:3.6.2)
- b. Write a short note on string taxonomy. 06 (2:5:2.6.2)
- c. Interpret the following string functions with examples: 08 (3:5:2.6.2)
(i) strcat (ii) strchr (iii) strcmp (iv) strcpy

(OR)

- 10. a. Write a C program to convert characters of a string into lower case. 06 (3:5:3.6.2)
- b. What is pointer and explain declaring pointer variable with example. 06 (3:5:3.6.2)
- c. Define structure. Explain with syntax and example how to declare structure. 08 (3:5:3.6.2)

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