Basavarajeswari Group of Institutions   **2022 SCHEME**

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

USN | | | | | | | | | | Course Code | 2 | 2 | E | S | C | 1 | 4 | 5 |

First Semester B.E. Degree Summer Semester Examinations, September/October 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

Q. No		Question	Marks	(RBTL:CO:PI)
		Module-1		
1.	a.	Explain the different phases of software development lifecycles.	08	(2 :1 : 1.3.1)
	b.	Define computer and its characteristics features in detail.	06	(2 :1 : 1.3.1)
	c.	Write a short note on monitors and keyboard.	06	(2 :1 : 1.3.1)
		(OR)		
2.	a.	Explain basic structure of a computer with block diagram.	06	(2 :1 : 1.3.1)
	b.	Explain the basic structure of 'C' program with an example.	06	(2 :1 : 1.3.1)
	c.	Explain different types of tokens in C with example.	08	(2 :1 : 1.3.1)
		Module-2		
3.	a.	Write a C program to find the largest of two numbers.	06	(3 :2 : 2.4.1)
	b.	Explain any two operators with suitable example.	06	(2 :2 : 1.3.1)
	c.	Explain if, if…else with syntax and suitable example.	08	(2 :2 : 1.3.1)
		(OR)		
4.	a.	Explain WHILE and DO-WHILE loop with syntax, flowchart and simple example.	08	(2 :2 : 1.3.1)
	b.	Write a C program that accepts a number from 1 to 10. Print whether the number even or odd using a switch case construct?	06	(3 :2 : 2.4.1)
	c.	Explain 'for' loop statement with syntax, flowchart and example.	06	(2 :2 : 1.3.1)
		Module-3		
5.	a.	Write a note on scope of variables used in C language.	08	(2 :3 : 1.3.1)
	b.	Explain the call by value and call by reference related to functions with example of swapping of two variables used in C language.	08	(2 :3 : 1.3.1)
	c.	Write a short note on recursive function with examples.	04	(2 :3 : 1.3.1)
		(OR)		
6.	a.	What is an array? Explain declaration and initialization of array with suitable example.	06	(2 :3: 1.3.1)

Note: (**RBTL - Revised Bloom's Taxonomy Level: CO - Course Outcome: PI - Performance Indicator**)

	b.	Explain the terms function declaration, function call and function definition with a suitable example.	**08**	**(3 :3: 2.4.1)**
	c.	Write a C program to add two numbers using a user-defined function.	**06**	**(3 :3: 2.4.1)**

Module-4

7.	**a.**	What is 2-D array? Explain how to access the elements of a 2-D array.	**06**	**(2 :3: 1.3.1)**
	b.	Write a program to transpose a 3×3 matrix.	**08**	**(3 :3: 2.4.1)**
	c.	Explain the concept of passing 2-D arrays to functions.	**06**	**(2 :3: 1.3.1)**

(OR)

8.	**a.**	Write a C program to sort the elements of an array in ascending order using Bubble-sort technique.	**10**	**(3 :3: 2.4.1)**
	b.	Explain reading and writing strings with examples.	**10**	**(2 :3: 1.3.1)**

Module-5

9.	**a.**	Explain the following terms: (i) Fixed-length strings (ii) Variable-length strings (iii) Length-controlled strings (iv) Delimited strings(v) Global Memory	**10**	**(2 :3: 1.3.1)**
	b.	Explain the following string functions: (i)strchr (ii) strcpy (iii) strcmp (iv) strlen (v) strspn	**10**	**(2 :3: 1.3.1)**

(OR)

10.	**a.**	What is pointer and explain declaring pointer variables with examples.	**10**	**(2 :4: 1.3.1)**
	b.	Explain structure with syntax and write a program to declare a structure to store information of a particular book.	**10**	**(3 :4: 1.3.1)**

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