Reg. No.				

## G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.



## UG DEGREE END SEMESTER EXAMINATIONS - NOVEMBER 2024.

(For those admitted in June 2023 and later)

## PROGRAMME AND BRANCH: B.Sc., ELECTRONICS

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE	
I	PART - III	ELEXTIVE GENERIC -1	U23EL1A1	C PROGRAMMING	

Date	⊔ <mark>&amp; S</mark> essi	ion: 14	.11.2024/FN Time: 3 hours Maximum: 75 Marks
Course Outcome	Bloom's K-level	Q. No.	<u>SECTION – A (</u> 10 X 1 = 10 Marks) Answer <u>ALL</u> Questions.
CO1	K1	1.	1) What does the following C expression do? x = (x<<1) + x + (x>>1); a) Multiplies an integer with 7 b) Multiplies an integer with 3.5 c) )Multiplies an integer with 3 d) Multiplies an integer with 8
CO1	K2	2.	What does the following expression do? x = x & (x-1)  a) Sets all bits as 1  b) Makes x equals to 0  c) Turns of the rightmost set bit  d) Turns of the leftmost set bit
CO2	K1	3.	Recursion is a method in which the solution of a problem depends on  a) Larger instances of different problems b) Larger instances of the same problem c) Smaller instances of the same problem d) Smaller instances of different problems
CO2	K2	4.	Recursion is similar to which of the following?  a) Switch Case b) Loop c) If-else d) if elif else
CO3	K1	5.	Which of the following is not possible in C?  a) Jagged Array b) Rectangular Array c) Cuboidal Array d) Multidimensional Array
CO3	K2	6.	What are the applications of a multidimensional array?  a) Matrix-Multiplication b) Minimum Spanning Tree c) Finding connectivity between nodes d) All of the mentioned
CO4	K1	7.	Which of the following is an incorrect syntax to pass by reference a member of a structure in a function? (Assume: struct temp{int a;}s;)  a) func(&s.a);  b) func(&(s).a);  c) func(&(s.a));  d) none of the mentioned
CO4	K2	8.	What does the following statement mean? int (fp)(char) a) pointer to a pointer b) pointer to an array of chars c) pointer to function taking a char* argument and returns an int d) More than one of the above
CO5	K1	9.	What is the advantage of #define over const?  a) Data type is flexible b) Can have a pointer c) Reduction in the size of the program d) None of the mentioned
CO5	K2	10.	Which of the following properties of #define is not true?  a) You can use a pointer to #define b) #define can be made externally available c) They obey scope rules d) All of the mentioned

Course	Bloom's K-level	Q. No.	$\frac{\text{SECTION} - B \text{ (5 X 5 = 25 Marks)}}{\text{Answer } \frac{\text{ALL}}{\text{Questions choosing either (a) or (b)}}$
CO1	К3	11a.	Discuss the bitwise operator in C. (OR)
CO1	КЗ	11b.	Write a short note on the Logical operators.
CO2	КЗ	12a.	Apply getch and putch in a program to demonstrate its function. (OR)
CO2	КЗ	12b.	Envision about the Console I/O functions.
CO3	K4	13a.	Write short notes on the multi dimensional arrays. (OR)
CO3	K4	13b.	Write a simple program using Pointers and strings.
CO4	K4	14a.	Identify the usage of Pointers in data manipulation. (OR)
CO4	K4	14b.	Discover the significance of Structures in database management.
CO5	K5	15a.	Evaluate the File structure in C. (OR)
CO5	K5	15b.	Assess the functions of file inclusion.

Course Outcome	Bloom's K-level	Q. No.	$\frac{\text{SECTION} - C \text{ (5 X 8 = 40 Marks)}}{\text{Answer } \underline{\text{ALL }} \text{Questions choosing either (a) or (b)}}$
CO1	K3	16a.	Describe the Data types with neat sketch. (OR)
CO1	КЗ	16b.	Envisage the relational operators logical operators with neat examples.
CO2	K4	17a.	Write a note on following functions.  (i) getch and putch (ii) getchar and putchar.  (OR)
CO2	K4	17b.	Scrutinize different Scan and Print functions with suitable programs.
CO3	K4	18a.	Explain arrays of pointers and pointers to an array and with neat diagram.  (OR)
CO3	K4	18b.	Analyse the Dynamic memory allocation with necessary program.
CO4	K5	19a.	Summarize the array structure with neat sketch. (OR)
CO4	K5	19b.	Survey in detail on the array of pointers.
CO5	K5	20a.	Paraphrase about the Formatted I/O functions with neat diagram. (OR)
CO5	K5	20b.	Assess the Compiler control directives with neat sketch.