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RV COLLEGE OF ENGINEERING®

(An Autonomous Institution affiliated to VTU) IV Semester B. E. Examinations Nov-2022

BRIDGE COURSE: C-PROGRAMMING

Time: 02 Hours Maximum Marks: 50

Instructions to candidates:

- 1. Answer five FULL questions.
- 2. Question number 1, 6 and 7 are compulsory. Answer any one full question from 2 and 3 & one full question from 4 and 5.

PART A

| 1 | a | Draw a flowchart to add two numbers entered by the user. | 03 |
|---|---|--|----|
| | b | Explain the different features offered by the c programming language? | 03 |
| | C | Explain the different data types and format specifiers in C programming | |
| | | language. | 04 |
| | | | |
| 2 | a | Develop a C program to print a block F using hash (#), where the F has a height of six characters and width of five and four characters. And also to print a big 'C'. Expected Output: ###### # ###### # ####### ###### | |
| | | ## ## | |
| | | ##### | 05 |
| | b | Explain in detail about "The unformatted input functions" in C programming | |
| | | language with sample code snippet. | 05 |
| | | OR | |
| | | OR . | |
| 3 | | Explain in details about "Operators are used to perform operations on variables and values" in C programming language with sample code snippet. | 10 |

| 4 | a b | Describe in details about the different types of decision making statements used in C programming language. Develop a C program to read the age of a candidate and determine whether he / she is eligible for casting his/her own vote. | 06 04 | | | |
|---|--------|--|----------|--|--|--|
| | | OR | | | | |
| 5 | a b | Explain in details about types of loops to handle looping requirements in C programming language. Write a program in C to display the multiplication table of a given integer Test data: Input the number (Table to be calculated): 15 <i>Expected Output:</i> $15X1 = 15$ | 06 | | | |
| _ | | 15X10 = 150 | 04 | | | |
| 6 | | Explain in detail about the following with sample C programming language code snippet. 1. Array declaration 2. Array initialization 3. Different ways to access array elements. | 10 | | | |
| 7 | a b | Write the differences between call by value and call by reference in C programming language with example code. What is the usage of the pointer in C and also write a C program to swap two numbers without using the 3 rd variable using pointers? | 05 05 | | | |