

Code No: 181AF

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech I Year I Semester Examinations, January/February - 2024

C PROGRAMMING FOR ENGINEERS

(Common to ECE, EIE)

Time: 3 Hours

Max. Marks: 60

**Note:** This question paper contains two parts A and B.i) **Part- A** for 10 marks, ii) **Part - B** for 50 marks.

- Part-A is a compulsory question which consists of ten sub-questions from all units carrying equal marks.
- Part-B consists of **ten questions** (numbered from 2 to 11) **carrying 10 marks each**. From each unit, there are two questions and the student should answer one of them. Hence, the student should answer five questions from Part-B.

**PART- A****(10 Marks)**

- 1.a) What is linker? [1]
- b) What is an Object code? [1]
- c) What is Dangling else problem? [1]
- d) What is Type conversion? [1]
- e) What are User defined functions? [1]
- f) Discuss about Character arrays. [1]
- g) What are Macros? [1]
- h) Write the syntax for calloc() function. [1]
- i) Define Union? [1]
- j) What are Bit-fields? [1]

**PART - B****(50 Marks)**

2. Explain Flowchart and Pseudo code with examples. [10]  
**OR**
- 3.a) Write about Primary Data types and their storage requirements in C.  
b) Differentiate among all storage classes. [5+5]
- 4.a) Explain for and do-while loops with examples.  
b) Write a C code to find GCD of two given numbers. [4+6]  
**OR**
- 5.a) Explain Relational Operators.  
b) Write a C program to find the results of all relational operators of two given numbers. [5+5]

- 6.a) What is call by value? Explain.  
b) Write a C code to swap two given numbers using Call by value parameter passing technique. [4+6]

**OR**

- 7.a) Write the advantages of using functions in C.  
b) Write a C code to find Factorial of a given number using recursion. [3+7]

- 8.a) Write about the use of pointers in Self-referential structures. Give example  
b) How the pointers are declared, initialized and used in C programming. [4+6]

**OR**

- 9.a) What are Command-line arguments? Explain its usage.  
b) Write a C program two accept three command line arguments and to find biggest of them. [4+6]

10. Explain Structures and its usage in C in detail. [10]

**OR**

11. Explain Selection sort method with an example. Write the logic of it in C. [10]

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