

Code No: 132AD

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B.Tech I Year II Semester Examinations, July/ August - 2021****COMPUTER PROGRAMMING IN C****(Common to EEE, ECE, CSE, EIE, IT, ETM)****Time: 3 Hours****Max. Marks: 75**

**Answer any five questions**  
**All questions carry equal marks**

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- 1.a) What are the steps in program development?  
b) Write an algorithm to check whether a given number is prime or not. [7+8]
2. What are the various data types? Give its size and the need for type casting. [15]
- 3.a) What are the four storage classes? Discuss their scope rules.  
b) How upward communication is possible among functions? [8+7]
- 4.a) Draw a flowchart for bubble sort.  
b) How to pass an array, an element of an array as a parameter to a function? [8+7]
5. What is meant by dynamic memory management? How C language supports programmers in memory management? Explain with relevant code segments. [15]
- 6.a) Write a C program for converting an array of alphabet from lowercase to uppercase.  
b) Write a C program to illustrate the use of indirection operator to access the value pointed by a pointer. [8+7]
- 7.a) Is union preferred over structures by good programmers? Justify your answer.  
b) What is the need of enumerated data types? [7+8]
- 8.a) Differentiate between text files and binary files.  
b) Demonstrate the use of fread() and fclose() functions. [7+8]

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