

R15

Code No: 121AF

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year Examinations, August – 2018

COMPUTER PROGRAMMING

(Common to CE, EEE, ME, ECE, CSE, EIE, IT, MCT, ETM, MMT, AE, AME, MIE, PTM, CEE, MSNT)

Time: 3 hours

Max. Marks: 75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART- A

(25 Marks)

- |      |  |     |
|------|--|-----|
| 1.a) | Define Type conversion and give an example.            | [2] |
| b)   | What is Operator Precedence in Expression Evaluation?  | [3] |
| c)   | List the applications of arrays.                       | [2] |
| d)   | What are preprocessor commands?                        | [3] |
| e)   | Explain array of strings.                              | [2] |
| f)   | What is Pointer? Write down its applications.          | [3] |
| g)   | Write any two differences between structure and union. | [2] |
| h)   | Explain file status functions.                         | [3] |
| i)   | What are the drawbacks of linear search?               | [2] |
| j)   | List and explain the stack operations.                 | [3] |

PART-B

(50 Marks)

2. Explain the following operators:
- a) Relational Operators
  - b) Bitwise Operators
  - c) Conditional Operator.
- [10]
- OR
- 3.a) Describe the procedure of creating and running a C program.
- b) What is an Identifier? List the rules to declare and define an identifier.
- [5+5]
4. What is meant by the scope of variables and explain the types of storage class in C? [10]
- OR
- 5.a) Write a C program to find the factorial of a given number using recursion.
- b) What is an Array? Explain the representation and Indexing of Two-dimensional array.
- [5+5]

6.a) Explain briefly about the pointer arithmetic. [5+5]  
b) Write a C program to reverse a string without using `strrev()` function.

**OR**

7.a) Describe briefly about the pointers to pointers with example. [5+5]  
b) Explain in detail about the String Input/output functions.

8. Write a C program to create a marks sheet for students and calculate the average marks obtained by each student using Structures. [10]

**OR**

9.a) Explain in detail about the Enumerated types. [5+5]  
b) Differentiate between text and binary files in detail.

10. Explain Binary Search method with an example. [10]

**OR**

11. What is Queue? Describe Enqueue and Dequeue operations of Queue. [10]

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