

Hall Ticket Number:

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I/IV B.Tech (Regular / Supplementary – Repeat Exam) DEGREE EXAMINATION  
January, 2021

Second Semester

COMPUTER PROGRAMMING WITH C

Time: Three Hours

Maximum: 60 Marks

Answer All Questions from Part - A.

(1X12= 12 Marks)

Answer ANY FOUR questions from Part - B

(4X12= 48 Marks)

**Part - A**

1. Answer all questions

(1X12= 12 Marks)

- Write the syntax for Conditional Operator.
- What is Type casting?
- What are the symbols used in Flowchart?
- What is an array?
- What is the difference between 1-D and 2-D arrays?
- List out String handling functions.
- Differentiate auto and static storage classes.
- Where Recursion is used?
- What is void pointer?
- Differentiate Structure and Union.
- What is enumerated data type?
- Write syntax for opening and closing a file.

**Part - B**

- Describe the various types of Operators in C language along with its priority. 8M
- Write a program to find the largest of the three given numbers. 4M
- Explain bitwise operators with examples. 8M
  - Write a program to find whether the given number is even or odd. 4M
- Explain various loop control statements in C. 6M
  - Write a program to find whether a given number is prime or not. 6M
- Explain different types of arrays with an example. 6M
  - Write a program to reverse a string. 6M
- Explain different Parameter passing mechanisms with examples. 8M
  - Write a program to perform linear search using functions. 4M
- Explain Dynamic memory allocation functions. 6M
  - Write a program for arranging numbers in ascending order using functions. 6M
- What are the different ways to access the members of structure elements in c? Give example for each case. 6M
  - Write a program to compute addition and multiplication on complex numbers. 6M
- Explain fseek() and ftell() with suitable examples. 6M
  - Write a program to display no of vowels in a given text file. 6M



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**I/IV B.Tech DEGREE EXAMINATION****November 20****Second Semester****Problem Solving with Programming****Scheme of Evaluation****Time: Three Hours****Maximum: 60 Marks****Answer Question No.1 compulsorily.****(1X12= 12 Marks)****Answer ONE question from each unit.****(4X12= 48 Marks)****1. Answer all questions****(1X12= 12 Marks)**

- a) Write the syntax for Conditional Operator.  
syntax of Conditional Operator -1M
- b) What is Type casting?  
Type casting -1M
- c) What are the symbols used in Flowchart?  
Flowchart Symbols -1M
- d) What is an array?  
Array Definition -1M
- e) What is the difference between 1-D and 2-D arrays?  
difference between 1-D and 2-D arrays -1M
- f) List out String handling functions.  
String handling functions -1M
- g) Differentiate auto and static storage classes.  
auto and static storage classes. -1M
- h) Where Recursion is used?  
Recursion -1M
- i) What is void pointer?  
Void Pointer -1M

j) Differentiate Structure and Union.

Structure and Union difference -1M

k) What is enumerated data type?

enum data type -1M

l) Write syntax for opening and closing a file.

File opening & closing -1M

### UNIT I

2. a) Describe the various types of Operators in C language along with its priority. 8M

Types of Operators -6M

Priority -2M

b) Write a program to find the largest of the three given numbers. 4M

Program -4M

(OR)

3. a) Explain bitwise operators with examples. 8M

Six bitwise operators -6M

b) Write a program to find whether the given number is even or odd. 4M

Program -4M

### UNIT II

4. a) Explain various loop control statements in C. 6M

Three loops -6M

b) Write a program to find whether a given number is prime or not. 6M

Program -4M

(OR)

5. a) Explain different types of arrays with an example. 6M

1-D, 2-D & Multi Dimensional arrays -6M

b) Write a program to reverse a string. 6M

Program -6M

### UNIT III

6. a) Explain different Parameter passing mechanisms with examples. 8M

call by value & call by reference -8M

b) Write a program to perform linear search using functions. 4M

Program -4M

**(OR)**

7. a) Explain Dynamic memory allocation functions. 6M  
Dynamic memory allocation functions -6M
- b) Write a program for arranging numbers in ascending order using functions. 6M  
Program -6M

**UNIT IV**

8. a) What are the different ways to access the members of structure elements in c? Give example for each case. 6M  
Ways to access the members of structure elements -4M  
Example -2M
- b) Write a program to compute addition and multiplication on complex numbers. 6M  
Program -6M

**(OR)**

9. a) Explain fseek() and ftell() with suitable examples. 6M  
fseek() - 4M  
ftell() -2M
- b) Write a program to display no of vowels in a given text file. 6M  
Program -6M