26-09-22

Hall Ticket No.: | | | | | | | | | | |

Question Paper Code: CS1203ES

NARSIMHA REDDY ENGINEERING COLLEGE
(UGC-AUTONOMOUS)
BTECH I YEAR II SEMESTER REGULAR EXAMINATIONS, SEPTEMBER–2022
(Regulation: NR21)
PROGRAMMING FOR PROBLEM SOLVING

Time: 3 hours **Max. Marks: 70**

Answer any Five Questions
All Questions carry Equal Marks

		Marks	Bloom's Level
1	a. What is an operating system? Explain types of operating system.	6	L1
	b. Describe the structure of C program. Explain each with example.	8	L3
2	a. Write about logical, relational and unary operators.	7	L2
	b. What are the conditional control statements C?	7	L1
3	a. Write the differences between Array and Structure with example.	7	L2
	b. Write a program multiplication of two matrices.	7	L3
4	a. Explain array of structures and structure within a structure with example.	7	L2
	b. What is a file? Explain how the file open and file close functions?	7	L1
5	a. Explain the various file handling operations in C.	7	L2
	b. Write the syntax for reading a file and writing file.	7	L3
6	a. Explain the call by value and call by reference mechanism with example.	7	L2
	b. Write a C program Fibonacci series using recursion function.	7	L3
7	a. What is dynamic memory allocation? Write and explain the different dynamic memory allocation functions in C.	7	L1
	b. What are the limitations of recursive function in C.	7	L3
8	a. Write an algorithm for quick sort program in C	7	L3
	b. Write an algorithm for quadratic equation program.	7	L3

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Hall Ticket No.: | | | | | | | | | | | Question Paper Code:

NARSIMHA REDDY ENGINEERING COLLEGE
(UGC-AUTONOMOUS)
B.TECH I YEAR II SEMESTER SUPPLEMENTARY EXAMINATIONS, SEPTEMBER–2022
(Regulation: NR20)
PROGRAMMING FOR PROBLEM SOLVING

Time: 3 hours **Max. Marks: 75**

Answer any Five Questions
All Questions carry Equal Marks

		Marks	Bloom's Level
1.	a. Write an algorithm to find the roots of a quadratic equation	7	L1
	b. Explain various decision making statements used in C with examples	8	L1
2.	a. Write a program to find the string length by using string function..	7	L1
	b. Define array. Explain about different types of arrays.	8	L2
3.	a. What is the difference between structure and union?	7	L4
	b. Explain different Input/Output operations on files.	8	L1
4.	a. Write a 'C' program for printing Factorial of a given number by using recursive function.	7	L6
	b. Briefly discuss about any four string handling functions.	8	L2
5.	a. Write a program for insertion sort.	7	L1
	b. Briefly explain about read and write operations of a file.	8	L2
6.	Develop an algorithm for binary search and explain with an illustration.	15	L4
7.	a. Explain with examples how arrays are passed as arguments in functions.	7	L1
	b. Explain about dynamic memory allocation functions.	8	L6
8.	Define function. Compare call by value and call by reference with an example.	15	L3

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Hall Ticket No.: | | | | | | | | | | |

Question Paper Code: CS1103ES

NARSIMHA REDDY ENGINEERING COLLEGE
(UGC-AUTONOMOUS)
B.TECH I YEAR I SEMESTER SUPPLEMENTARY EXAMINATIONS, SEPTEMBER-2022
(Regulation: NR21)
PROGRAMMING FOR PROBLEM SOLVING

Time: 3 hours **Max. Marks: 70**

Answer any Five Questions
All Questions carry Equal Marks

		Marks	Bloom's Level
1.	a. What is a storage class? What are the storage class in C language.	7M	L2
	b. Develop a program to find larges of 3 numbers using ternary operator.	7M	L3
2.	a. Write a program for string length without library function.	7M	L3
	b. What are the differences between structure and union?	7M	L2
3.	a. Explain preprocessor commands.	7M	L2
	b. Write a program to copy the contents of one file into another file.	7M	L3
4.	a. Explain call by reference parameter passing.	7M	L2
	b. Develop a program to find factorial of number using recursion.	7M	L3
5.	a. Develop an algorithm for bubble sort.	7M	L4
	b. Develop a program for binary search.	7M	L4
6.	a. Write a program to find the roots of a quadratic equation.	7M	L3
	b. Explain How to pass arrays to functions with an example.	7M	L2
7.	a. Explain fseek() and ftell() functions with an example.	7M	L2
	b. Evaluate 5+3*4-6/2	7M	L5
8.	a. What is a command line argument? How to pass arguments? Explain with an example.	7M	L2
	b. Explain switch statement with an example.	7M	L2

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Hall Ticket No.: | | | | | | | | | | | Question Paper Code:

NARSIMHA REDDY ENGINEERING COLLEGE

(UGC-AUTONOMOUS)

B.TECH I YEAR I SEMESTER SUPPLEMENTARY EXAMINATIONS, SEPTEMBER–2022

(Regulation: NR20)

PROGRAMMING FOR PROBLEM SOLVING

(Common to CIVIL, ME, ECE, CSE (AI&ML))

Time: 3 hours **Max. Marks: 75**

Answer any Five Questions
All Questions carry Equal Marks

		Marks	Bloom's Level
1.	Define operator. Explain various types of operators in C.	15	L2
2.	a. Explain if and if-else statement with example program.	7	L1
	b. Illustrate the uses of storage classes in 'C'	8	L2
3.	a. Compare and contrast structure and union.	7	L4
	b. Interpret the purpose of self-referential structures with an example.	8	L5
4.	a. Write a 'C' program to find the minimum value from the given 'n' numbers using arrays.	7	L6
	b. Briefly discuss about any four string handling functions.	8	L2
5.	a. What are pre-processor directives and explain include and define preprocessor commands.	7	L1
	b. Briefly explain about read and write operations of a file.	8	L2
6.	Define function. Compare call by value and call by reference with an example.	15	L4
7.	a. Explain with examples how arrays are passed as arguments in functions.	7	L1
	b. Define recursion and write a 'C' program to print the Fibonacci series using recursion.	8	L6
8.	Develop an algorithm for bubble sort and explain with an illustration.	15	L3

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Previous QuestionPapers

Code No: 152AF

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year II Semester (Special) Examinations, January - 2021

PROGRAMMING FOR PROBLEM SOLVING

(Common to EEE, CSE, IT)

Time: 2hrs Max.Marks:75

Answer any five questions

All questions carry equal marks

- - -

1. Explain about various Arithmetic operators available in C language with examples. [15]
2. What is an array? Explain the one dimensional array with suitable example program. [15]

3.a) Explain about fseek() and ftell().
b) Write the differences between structure and union with examples. [8+7]

4.a) Explain the call-by-value and call-by-reference parameter passing methods.
b) Write about the following functions:
i) malloc( ) ii) calloc [7+8]

5. Write and explain the algorithm for finding minimum and maximum numbers of a given set. [15]
6. Explain switch statement. Explain its usage with a sample C program. [15]
7. Explain the enumerated data type with an example program. [15]
8. Describe about the various preprocessor commands used in C. [15]

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Code No: 152AF **R18**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year II Semester Examinations, July/August - 2021PROGRAMMING FOR PROBLEM SOLVING

(Common to EEE, CSE, IT, ITE)

Time: 3 Hours **Max. Marks: 75**

Answer any five questions

All questions carry equal marks

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1.a) Differentiate between typecasting and type conversion.
b) Write a program to count the number of vowels in a text. [7+8]

2.a) Write a program to read two numbers. Then find out whether the first is a multiple of the second number.
b) Explain the use of Command line argument with an example. [8+7]

3.a) Describe about the enumerated data type with an example.
b) Explain about the use of pointers in self referential structures. [7+8]

4.a) Write a program to transpose of a 3×3 matrix.
b) Differentiate between structure and an array. [8+7]

5.a) Explain the importance of #define preprocessor directive.
b) Write a program to read a file that contains lowercase characters. Then write thesecharacters into another file with lower case characters converted into upper case.[7+8]

6.a) Write a program to merge two files into a third file. The names of the files mustbe entered using command line arguments.
b) Distinguish between #ifdef and #ifndef. [8+7]

7.a) Write a recursive program to find out the factorial of given number.
b) Explain about the dynamic memory allocation. [8+7]

8.a) Write an algorithm to find out the minimum and maximum numbers of a givenset.
b) Explain about the Bubble sort with an example. [7+8]

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Code No: 152AF **R18**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year II Semester Examinations, September/October - 2021
PROGRAMMING FOR PROBLEM SOLVING
(Common to EEE, CSE, IT, CSIT, ITE, CE(SE), CSE(CS), CSE(DS), CSE(Networks)

Time: 3 Hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks

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1. Explain about various logical operators available in C language with examples. [15]

2.a) What are the steps involved in program development process? Explain.
b) Write program to check whether the given integer is palindrome or not. [8+7]

Explain the following string handling functions with examples:
i) strcpy( ) ii) strcat( )
b) Write the differences between structure and union with examples. [8+7]

Explain the following functions in file operations:
i) getw( ) ii) putw( )
b) Write a C program to copy the content of one file into another file. [8+7]

5. What are the different ways of passing parameters to the function? Explain. [15]

6. Write a C program to perform the operation of addition of two matrices. [15]

7. Explain in detail about preprocessor commands. [15]

8. Write an algorithm for linear search and explain with an illustration. [15]

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Code No: 152AF **R18**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech. Year II Semester Examinations, November/December - 2020PROGRAMMING FOR PROBLEM SOLVING

(Common to CSE, IT, ITE)

Time: 2 hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks

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1.a) Explain in detail about relational operators with examples.
b) In C if any variable is auto storage class by default, then why auto keyword introduced inC? Explain. [7+8]

2. Write a C program that performs the following operations (Use structures)
a) Reading a complex number
b) Writing a complex number
c) Addition of two complex numbers. [5+5+5]

3.a) Discuss the random access using fseek( ) function.
b) Give a brief note on ftell( ) and rewind( ) function. [7+8]

4.a) Write a recursive function in C to find the sum of array elements.
b) Explain the passing parameters to functions. [7+8]

5. Which searching technique is best among linear search and binary search, justify youranswer. [15]

6.a) Write a C Program to find maximum number among three numbers using conditionaloperator.
b) Define Flow Chart. List some commonly used symbols and specify its purpose. [7+8]

7.a) Write a C program to find given string is palindrome or not without using any stringfunctions.

b) Define pointer. Write the advantages and disadvantages of using pointers. [7+8]

8. Write a C program to merge the contents given two existing files into new file. [15]

---ooOoo---