

# TECHNO INDIA NJR INSTITUTE OF TECHNOLOGY

Approved by AICTE & Affiliated to Rajasthan Technical University

www.technonjr.org

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Date: 15/09/2021

## Notice: Academic Calendar 2021-2022

RAJASTHAN TECHNICAL UNIVERSITY KOTA

Academic Calendar for Odd Semester for Session 2021-22

Course: Bachelor of Technology (B.TECH.)

Semester	I	III	V	VII
Induction Program	*			
Commencement of Classes	*	20.09.2021	20.09.2021	01.09.2021
Commencement of First Mid Term	*	28.10.2021	25.10.2021	04.10.2021
Commencement of Second Mid Term	*	08.12.2021	29.11.2021	15.11.2021
Last Working Day	*	15.01.2022	24.12.2021	15.12.2021
Commencement of Practical Exams	*	17.01.2022	20.01.2022	16.12.2021
Commencement of Theory Exams	*	27.01.2022	05.01.2022	06.01.2022
Winter Break	Not Applicable			
Commencement of Classes for Even Semesters (2020-21)	II	IV	VI	VIII
	*	10.02.2022	27.01.2022	10.01.2022

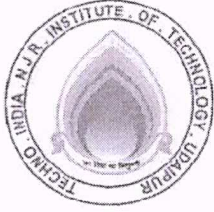
### Academic Calendar Odd Semester 2021-22

Particulars	B. Tech- I	B. Tech- III	B. Tech- V	B. Tech- VII
Commencement of classes	*	20-09-2021	20-09-2021	01-09-2021
Last Working Day	*	15-01-2022	24-12-2021	15-12-2021
Course Progression Report-I	*	20-10-2021	20-10-2021	20-10-2021
First Mid Term Exam	*	28-10-2021	25-10-2021	25-10-2021
Remedial Class-I	*	08-11-2021	08-11-2021	08-11-2021
Course Progression Report-II	*	04-12-2021	20-11-2021	20-11-2021
Second Mid Term Exam	*	08-12-2021	29-11-2021	22-11-2021
Remedial Class-II	*	16-12-2021	09-12-2021	09-12-2021
Commencement of Theory Exam	*	27-01-2022	05-01-2022	06-01-2022
Commencement of Practical Exam	*	17-01-2022	20-01-2022	16-12-2021

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**Techno India NJR Institute of Technology**

**Course File**

**Programming for Problem Solving (1FY3- 06)**

**Akhilesh Deep Arya**

**Department of CSE**

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### 1FY3-06/ 2FY3-06: Programming for Problem Solving

Credit: 2  
2L+0T+0P

Max. Marks: 100 (IA  
End Term Ex

SN	CONTENTS
1	<b>Fundamentals of Computer:</b> Stored program architecture of computers, Storage device- Primary memory, and Secondary storage, Random, Direct, Sequential access methods, Concepts of High-level, Assembly and Low-level languages. Representing algorithms through flowchart and pseudo code.
2	<b>Number system:</b> Data representations, Concepts of radix and representation of numbers in radix r with special cases of r=2, 8, 10 and 16 conversion from radix r1 to r2, r's and (r-1)'s complement, Binary addition, Binary subtraction, Representation of alphabets.
3	<b>C Programming:</b> Problem specification, flow chart, data types, assignment statement, input output statements, developing simple C programs: for loops, while loops, do-while loops, switch statement, break statement, continue statement, development of C programs using above statements. Arrays. functions. parameter passing.

#### Course Overview:

This course on problem solving with C programming covers, C Programming language essentials such as programming techniques, decision making statements, iterations, functions, macros, 1D array, 2D arrays, pointers, dynamic memory allocation for arrays as well as structures, and file handling.

To master any programming language one needs hands-on practice along with clarity of concepts. The course emphasis 50% of course duration on Lab practice and, Group Exercise, Classroom Quiz to help increase students curiosity.

Programming concepts are the basic requirement for Computer Science graduates in order to get good jobs in IT companies. Most of the questions asked during the placement drive for the IT Company are created from C programming. Student should learn and develop problem solving abilities using C programming for a good career.

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## Course Outcome:

1FY306	Cognitive Level	Programming for Problem Solving Year of study: 2020-21
1	Application	Students will be able to write algorithms and draw flowcharts for various problems, using components of flowcharts.
2	Application	Students will be able to describe architecture of computer and solve number system problems.
3	Application	Students will be able to memorize different data types and operators in C and to write, compile and debug programs in C language, using the compiler.
4	Synthesis	Students will be able to design flow charts and write programs with multiple instructions, involving decision structures and loops in C on any 64 bit compiler.
5	Synthesis	Students will be able to design flow chart and write programs involving functions and to handle file reading writing operations using any 64 bit compiler.

## Prerequisites:

1. Student should be familiar with the basic computer terminologies.
2. Students should be familiar with different operators for the arithmetic operations.

## Mapping COs, POs and PSOs:

Programming for Problem Solving Year of study: 2020-21																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	
CO11FY306.1	3	2	1	2	3	1	0	0	2	0	1	3	3	2	0	
CO11FY306.2	3	2	1	3	3	1	0	0	2	0	1	3	2	2	0	
CO11FY306.3	3	3	1	3	3	0	0	0	2	0	1	3	2	2	0	
CO11FY306.4	3	3	2	3	3	0	0	0	2	0	1	3	2	2	0	
CO11FY306.5	3	3	3	3	3	0	0	0	2	0	1	3	2	2	0	
C11FY306 (AVG)	3.00	2.60	1.60	2.80	3.00	0.40	0.00	0.00	2.00	0.00	1.00	3.00	2.20	2.00	0.00	

## Course Coverage Module Wise:

Lect. No.	Unit	Outcome
1.	1	Student should be able to list various system and application software.
2.	1	Student should be able to explain different memory types based on the access methods used
3.	1	Student should be able to differentiate between machine, assembly and, high level programming languages, also the translators used to convert one language into another
4.	1	Student should be able to design algorithms to solve problem statements such as to find factorial of a single digit number or printing Fibonacci series

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5.	1	Students will identify various input output devices
6.	1	Students should be able to create a flow chart of the given problem statements
7.	2	Student should be able to identify various number system formats.
8.	2	Students should be able to convert a number represented in radix (r) in other radix (r')
9.	2	Students should be able to perform addition and subtraction in binary, octal and, hexadecimal number system
10.	3	Student should be able to list various data types and their size
11.	3	Student should be able to list all the arithmetic operators one can use in the C programming
12.	3	Student should be able to write C program for basic operations such as sum of 2 numbers and swapping of 2 values
13.	3	Students should be able to debug the program and identify the basic compile time errors occur during writing of C program
14.	3	Students should be able to apply control statements (if, else, switch case) in their C programs, and write the programs such as odd/ even, greater among 2 values
15.	3	Students should be able to use looping statements in C program and, develop programs like printing table of a number.
16.	3	Practice programs for the students such as Palindrome, reverse of a number sum of digit
17.	4	Student should be able to create an one dimensional array and store values in it
18.	4	Students should be able to perform insertion and deletion operations on 1-D array
19.	4	Students should be able to perform sum on N elements and linear search operations on an array
20.	4	Students should be able to perform referencing and dereferencing using pointer variables
21.	4	Students should be able to implement array using pointers.
22.	4	Student should be able to write C code to perform dynamic memory allocation.
23.	4	Student should be able to create user define functions and pass array as an arguments in the function.
24.	4	Student should be able to write recursive code to calculate factorial or to solve similar kind of problem statements.
25.	5	Students should be able to store heterogeneous data using structures.
26.	5	Student should be able to save multiple records using array of structure.
27.	5	Student should be able to write C code to create file and save user data into it.
28.	5	Students should be able to transfer data from one file to another using C program

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### Course Level Problems (Test Items):

CO.NO.	Problem description
1	A. Write an algorithm to find factorial of a given number. B. Draw a flow chart to swap 2 numbers
2	A. Convert $(101010101)_2$ in its Octal equivalent B. Explain all the primary and secondary memory units.
3	A. Write an algorithm of linear search. B. Write an algorithm to perform insertion and deletion operations in an array
4	A. Write an algorithm to find whether a given number is palindrome and not? B. Write a program which takes details of multiple employees using structures and print the details.
5	A. Write a program to perform read and write operations in file. B. Write a program to copy content of one file into another.

### Assessment Methodology:

1. Online quiz on kahoot/Moodle after every module completion.
2. Practical exam in lab where they have to write code on C compiler for the given problem statement. (Once in a week)
3. Assignments one from each unit.
4. Midterm subjective paper where they have to write algorithms or programs to solve different problem statements explained in the modules. (Twice during the semester)
5. Final paper at the end of the semester subjective.

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## Teaching and Learning resources unit-wise:

### Unit-1

#### Tutorials

1. <https://www.javatpoint.com/first-c-program>
2. <https://www.javatpoint.com/compilation-process-in-c>
3. <https://www.javatpoint.com/variables-in-c>
4. <https://www.javatpoint.com/data-types-in-c>
5. <https://www.javatpoint.com/keywords-in-c>
6. <https://www.javatpoint.com/c-identifiers>
7. <https://www.javatpoint.com/c-operators>
8. <https://www.javatpoint.com/tokens-in-c>

#### NPTEL Video:

[https://www.youtube.com/watch?v=XTiil-LOY8&list=PLJvIzs\\_rP6R73WlvumJvCQJrOY3U5zqLj](https://www.youtube.com/watch?v=XTiil-LOY8&list=PLJvIzs_rP6R73WlvumJvCQJrOY3U5zqLj)

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## Unit-2

### Tutorial:

1. [https://drive.google.com/file/d/12kzkKZ\\_BX-TK3JYGLzvumyMf1Zsbsycv/view?usp=sharing](https://drive.google.com/file/d/12kzkKZ_BX-TK3JYGLzvumyMf1Zsbsycv/view?usp=sharing)
2. <https://www.cuemath.com/numbers/number-systems/>
3. <https://www.britannica.com/technology/computer-memory>

### Video Lecture:

<https://www.youtube.com/watch?v=QlyugGzih4k>

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### Unit-3

#### Tutorials:

1. <https://www.javatpoint.com/c-if-else>
2. <https://www.javatpoint.com/c-switch>
3. <https://www.javatpoint.com/if-else-vs-switch>
4. <https://www.javatpoint.com/c-loop>
5. <https://www.javatpoint.com/do-while-loop-in-c>
6. <https://www.javatpoint.com/while-loop-in-c>
7. <https://www.javatpoint.com/for-loop-in-c>
8. <https://www.javatpoint.com/nested-loops-in-c>
9. <https://www.javatpoint.com/infinite-loop-in-c>
10. <https://www.javatpoint.com/c-break>

#### NPTEL Video:

[https://www.youtube.com/watch?v=Io-kvjHI3vM&list=PLJvIzs\\_rP6R73WlvumJvCQJrOY3U5zqlj&index=7](https://www.youtube.com/watch?v=Io-kvjHI3vM&list=PLJvIzs_rP6R73WlvumJvCQJrOY3U5zqlj&index=7)

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## Unit-4

### Tutorials:

1. <https://www.javatpoint.com/functions-in-c>
2. <https://www.javatpoint.com/call-by-value-and-call-by-reference-in-c>
3. <https://www.javatpoint.com/recursion-in-c>
4. <https://www.javatpoint.com/storage-classes-in-c>
5. <https://www.javatpoint.com/c-array>
6. <https://www.javatpoint.com/two-dimensional-array-in-c>
7. <https://www.javatpoint.com/return-an-array-in-c>
8. <https://www.javatpoint.com/passing-array-to-function-in-c>
9. <https://www.javatpoint.com/structure-in-c>
10. <https://www.javatpoint.com/typedef-in-c>
11. <https://www.javatpoint.com/array-of-structures-in-c>
12. <https://www.javatpoint.com/nested-structure-in-c>

### NPTEL Video:

[https://www.youtube.com/watch?v=8TsCAWdf3qY&list=PLJvIzs\\_rP6R73WlvumJvCQJrOY3U5zq1j&index=25](https://www.youtube.com/watch?v=8TsCAWdf3qY&list=PLJvIzs_rP6R73WlvumJvCQJrOY3U5zq1j&index=25)

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## Unit-V

### Tutorials:

1. <https://www.javatpoint.com/file-handling-in-c>
2. <https://www.javatpoint.com/fprintf-fscanf-in-c>
3. <https://www.javatpoint.com/fputc-fgetc-in-c>
4. <https://www.javatpoint.com/fputs-fgets-in-c>
5. <https://www.javatpoint.com/fseek-in-c>
6. <https://www.javatpoint.com/rewind-in-c>
7. <https://www.javatpoint.com/ftell-in-c>

### NPTEL Video:

[https://www.youtube.com/watch?v=fWOnJFzOHYM&list=PLJvIzs\\_rP6R73WlvumJvCQJrOY3U5zqIj&index=46](https://www.youtube.com/watch?v=fWOnJFzOHYM&list=PLJvIzs_rP6R73WlvumJvCQJrOY3U5zqIj&index=46)

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## C Multiple Choice Questions and answers MCQ with Ans.

1) Use of functions

- A. Helps to avoid repeating a set of statements many times.
- B. Enhances the logical clarity of the program.
- C. Helps to avoid repeated programming across programs.
- D. All of the above.

Answer: Option D

2) Any C program

- A. Must contain at least one function.
- B. Need not contain any function.
- C. Needs input data.
- D. None of the above

Answer: Option A

3) What is function

- A. Function is a block of statements that perform some specific task.
- B. Function is the fundamental modular unit. A function is usually designed to perform a specific task.
- C. Function is a block of code that performs a specific task. It has a name and it is reusable.
- D. All of the above

Answer: Option D

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4) The default parameter passing mechanism is

- A.call by value
- B.call by reference
- C.call by value result
- D.None of these.

Answer:Option A

5)The recursive functions are executed in a .....

- A.Parallel order
- B.First In First Out order
- C.Last In First Out order
- D.Iterative order

Answer:Option C

6) When a function is recursively called all the automatic variables are stored in a .....

- A.Stack
- B.Queue
- C.Array
- D.Linked list
- E.Register

Answer:Option A

7) If a variable is a pointer to a structure, then which of the following operator is used to access data members of the structure through the pointer variable?

- A..
- B.&
- C.\*
- D.->

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Answer: Option D

8) A pointer is

- A. A keyword used to create variables
- B. A variable that stores address of an instruction
- C. A variable that stores address of other variable
- D. All of the above

Answer: Option C

9) The operator used to get value at address stored in a pointer variable is

- A. \*
- B. &
- C. &&
- D. ||

Answer: Option A

10) How will you free the allocated memory ?

- A. `remove(var-name);`
- B. `free(var-name);`
- C. `delete(var-name);`
- D. `dalloc(var-name);`

Answer: Option B

11) What function should be used to free the memory allocated by `calloc()` ?

- A. `dealloc();`
- B. `malloc(variable_name, 0)`
- C. `free();`
- D. `memalloc(variable_name, 0)`

Answer: Option C

12) Specify the 2 library functions to dynamically allocate memory?

- A. `malloc()` and `memalloc()`
- B. `alloc()` and `memalloc()`
- C. `malloc()` and `calloc()`
- D. `memalloc()` and `faralloc()`

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Answer: Option C

13) The declaration  
int (\*p) [5];  
means

A. p is one dimensional array of size 5, of pointers to integers.

B. p is a pointer to a 5 elements integer array.

C. The same as int \*p[

D. None of these

Answer: Option B

14) Which of the following is the correct way of declaring a float pointer:

A. float ptr;

B. float \*ptr;

C. \*float ptr;

D. None of the above

Answer: Option B

15) A mode which is used to open an existing file for both reading and writing

a) W

b) WW+

c) R+

d) A+

Answer: Option C

16) Select a function which is used to write a string to a file

a) puts()

b) putc()

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c) fputs()

d) fgets()

Answer: Option C

17) Select a function which is used to read a single character from a file at a time?

a) fscanf()

b) getch()

c) fgetc()

d) fgets()

Answer: Option C

18) Select a function which is used as a formatted output file function

a) printf()

b) fprintf()

c) puts()

d) fputs()

Answer: Option B

19) Select a program which get input data from datafile and also send output into datafile ,it is called as

a) files

b) file processing

c) data files

d) file handling

Answer: Option D

20) Select text file in which data is stored in

a) ASCII code

b) Binary code

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c)Octal code

d)text code

Answer:Option A

21) Select which is true about a stream

a)it is a general name given to a flow of data

b)it is simply a sequence of bytes.

c)it is a logical interface to the data file.

d)all of these.

Answer:Option D

22) select in which of the following the character conversion is possible

a)text stream

b)binary stream

c)output stream

d)input stream

Answer:Option A

23) which is data type of file pointer is

a)int

b)double

c)void

d)File

Answer:Option D

24) FILE is of type \_\_\_\_\_

A. int type

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- B. char \* type
- C. struct type
- D. None of the mentioned

Answer:Option C

25) fseek() should be preferred over rewind() mainly because

- A. rewind() doesn't work for empty files
- B. rewind() may fail for large files
- C. In rewind, there is no way to check if the operations completed successfully
- D. All of the above

Answer:Option C

26) Which function is used to delete the allocated memory space?

- A. Dealloc()
- B. free()
- C. Both a and b
- D. either a or b

Answer:Option B

27) What is the return type of malloc() or calloc()?

- A. int \*
- B. int \*\*
- C. void \*
- D. void \*\*

Answer:Option C

28) Which of the following are themselves a collection of different data types?

- A. String
- B. Structures
- C. Char
- D. None of the above

Answer:Option B

29) Which operator connects the structure name to its member name?

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- A. -
- B. ->
- C. .
- D. both . and ->

Answer: Option C

30) Which of the following cannot be a structure member?

- A. Function
- B. Array
- C. Structure
- D. None of the above

Answer: Option A

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## C Programming Assignment Questions

- A. Explain implicit and explicit type conversion with suitable example
- B. What will be the value of a static storage class variable that is declared but not initialized?
- C. What will be the output of the following code fragment?

```
x = '3'
switch (x){
case '1' : printf("one ");
case '3' : printf("three ");
case '5' : printf("five ");
default : printf("odd ");
break;
}
```

- D.  $(57)_{10} = (?)_2$
- E.  $(A57)_{16} = (?)_2$
- F.  $(1100111)_2 = (?)_8$
- G.  $(23A)_{16} = (?)_8$

- 1. Explain C tokens.
- 2. Explain the structure of C program. Explain all its essential part.
- 3. Describe the generation of computers.
- 4. Explain various type of memory in detail.
- 5. Explain control statements with example.
- 6. WAP to greater among 3 integer values.
- 7. Write a program to print fibonacci series starting with 0, 1.
- 8. Explain the difference between while and do while looping statements
- 9. Write a user define function to find sum of all the digits of number.
- 10. Write a program to print following pattern-

```
    *
  **
 ***
****
```

- 11.
- 12. What is defined by storage classes? Explain all the storage classes
- 13. Explain the difference between strcmp( ) and stricmp( ) library functions.

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Previous Year Question Papers:

<b>1E2406</b>	Roll No. _____	Total No. of Pages: <span style="border: 1px solid black; padding: 2px;">3</span>
	<b>1E2406</b>	
	<b>B. Tech. I/II - Sem. (Main / Back) Exam., March – 2021</b>	
	<b>ESC</b>	
<b>1FY1-06/2FY3-06 Programming for Problem Solving</b>		

Time: 2 Hours

[To be converted as per scheme]

Max. Marks: 65

Min. Marks: 23

*Instructions to Candidates:*

*Attempt all five questions from Part A, four questions out of six questions from Part B and one questions out of three from Part C.*

*Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used /calculated must be stated clearly.*

*Use of following supporting material is permitted during examination. (Mentioned in form No. 205)*

1. NIL

2. NIL

**PART – A**

**(Answer should be given up to 25 words only)**

**[5×2=10]**

**All questions are compulsory**

- Q.1 What is the difference between High level language and Low level language?
- Q.2 Write the syntax of switch case statement in C – language.
- Q.3 Write application areas of computer.
- Q.4 Explain Von Neumann Architecture.
- Q.5 What is keyword? Write names of keyword available in C.

## PART – B

(Analytical/Problem solving questions)

[4×10=40]

Attempt any four questions

Q.1 Write a program in 'C' to find maximum number among three number and also draw flow chart of this program.

Q.2 Write r's complement of the following numbers, where r is a radix (base) of these numbers-

(a)  $(10111010)_2$

(b)  $(34056)_8$

(c)  $(8750)_{10}$

(d)  $(7F3B)_{16}$

Q.3 Write the program to print the following patterns using loop-

(a)   *	(b)   1
*   *	1   2
*   *   *	1   2   3
*   *   *   *	1   2   3   4
*   *   *   *   *	1   2   3   4   5

Q.4 What is flow chart and algorithm? Draw a flow chart and check step by step whether a number is even or odd.

Q.5 Explain the concepts of file handling in 'C' language. Write a program to copy the data from source file to destination file.

Q.6 What is array? Explain array of structures with the help of suitable program. Also describe structure within structure with an example.

## PART – C

(Descriptive/Analytical/Problem Solving/Design Questions) [1×15=15]

Attempt any one questions

Q.1 Perform the following –

(a)  $(651.24)_8 = (?)_2$

(b)  $(5764)_{10} = (?)_8$

(c)  $(10111010)_2 + (10101000)_2$

(d)  $(7051)_{16} = (?)_2$

(e)  $(1111010.11010)_2 = (?)_{16}$

Q.2 What is memory? Discuss various types of memory. Explain primary and secondary memory in detail.

Q.3 Write a program to read marks of four subjects and print division.

Percentage	Division
$\geq 60$	First
$\geq 48 \ \& \ < 59$	Second
$\geq 36 \ \& \ < 47$	Third
$< 37$	Fail

---

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1E24

1E2406  
B. Tech. II - Sem. (Main) Exam., May - 2019  
ESC  
2FY3 - 06 Programming for Problem Solving  
Common for all Branches

Time: 2 Hours

Maximum Marks: 80

*Instructions to Candidates:*

*Attempt all five questions from Part A, four questions out of six questions from Part B and two questions out of three from Part C.*

*Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used /calculated must be stated clearly.*

*Use of following supporting material is permitted during examination. (Mentioned in form No. 205)*

1. NIL

2. NIL

**PART - A**

**(Answer should be given up to 25 words only)**

**[5×2=10]**

**All questions are compulsory**

- Q.1 Write the difference between compiler and interpreter. [2]
- Q.2 What is type casting? [2]
- Q.3 Explain primary memory and secondary storage. [2]
- Q.4 Write the difference between random access and sequential access method. [2]
- Q.5 What is structure? Write syntax of structure declaration. [2]

[1E2406]

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**PART - B**  
**(Analytical/Problem solving questions)**  
**Attempt any four questions**

[4×10=40]

- Q.1 What is recursion? Write a program to find factorial of a given number using recursion. [10]
- Q.2 Draw a block diagram of basic architecture of a computer system. [10]
- Q.3 What do you mean by function? Also explain types of functions available in C. [10]
- Q.4 Write a program to find the given number is palindrome or not. [10]
- Q.5 Write a program to swap two numbers using call by value and call by reference method. <http://www.rtuonline.com> [10]
- Q.6 Perform the following- [5×2=10]
- (a)  $9387_{(10)} = ?_{(16)}$
  - (b)  $A15C_{(16)} = ?_{(2)}$
  - (c)  $(10101)_2 - (01110)_2$
  - (d)  $(651.24)_{(8)} = ?_{(10)}$
  - (e)  $(111101011)_2 = ?_{(8)}$

[1E2406]

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**PART - C**

**(Descriptive/Analytical/Problem Solving/Design Questions) [2×15=30]**

**Attempt any two questions**

- Q.1 What is array? Explain types of array with suitable example. [15]
- Q.2 What do you understand by file handling? Explain various file handling functions used in C language. [15]
- Q.3 What is looping? Explain types of loop available in C. Also write a program to check the input number is prime or not. [15]
- 

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# CERTIFICATE

SOLEA

Issued 24 October, 2018

*This is to certify that*

**Eakansh jain**

*has successfully completed the*

**C Tutorial course**



**Yeva Hyusyan**  
Chief Executive Officer

Certificate #1089-11378321

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पंकज कुमार

**Dr. Pankaj Kumar Porwa**  
(Principal)



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Dr. Pankaj Kumar Porwal  
(Principal)





04/15/2020

**Akhilesh Joshi**

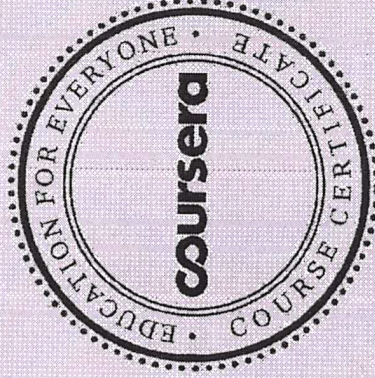
has successfully completed

**Programming for Everybody (Getting Started with Python)**

an online non-credit course authorized by University of Michigan and offered through Coursera

Charles Severance  
Clinical Professor, School of Information  
University of Michigan

**COURSE  
CERTIFICATE**



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Verify at [coursera.org/verify/6YV4M9RRTGXF](https://coursera.org/verify/6YV4M9RRTGXF)  
Coursera has confirmed the identity of this individual and their participation in the course.

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S.No.	Roll No.	Name	Prog.& Prob. Sol.		
			1	2	Grade
1	19ETCCS001	ABHA RATHORE	19	44	B
2	19ETCCS002	ABHISHEK MAHESHWARI	15	29	E+
3	19ETCCS003	AKSH MEHTA	15	46	C+
4	19ETCCS004	ANIKET KOTHARI	14	16	F
5	19ETCCS005	AVANI GUPTA	19	53	A
6	19ETCCS006	BHAVESH JINDAL	20	68	A++
7	19ETCCS007	BHAVINI JAIN	20	70	A++
8	19ETCCS008	CHIRAG RAMEJA	11	41	D+
9	19ETCCS009	DARSHANA JAIN	18	39	C
10	19ETCCS011	DEV TIWARI	13	30	E+
11	19ETCCS012	DHANRAJ THAWANI	14	29	E+
12	19ETCCS013	DHARMISHTHA AJMERA	19	35	C
13	19ETCCS014	DIKSHA BAPNA	19	38	C
14	19ETCCS015	DIKSHA UDANIYA	19	44	B
15	19ETCCS016	DIPESH VYAS	8	13	F
16	19ETCCS017	DIVYANSH NAGDA	13	28	E+
17	19ETCCS018	DIVYANSHI THAKURANI	19	54	A
18	19ETCCS019	DIVYATA SANADHYA	18	19	E
19	19ETCCS020	DIXITA MALI	19	59	A+
20	19ETCCS021	GANESHAM TAILOR	13	28	E+
21	19ETCCS022	HARDIK JOSHI	13	31	E+
22	19ETCCS023	HARSH ARORA	13	18	F
23	19ETCCS024	HARSHIT CHAUBISA	19	38	C
24	19ETCCS025	HARSHIT PALIWAL	14	28	E+
25	19ETCCS026	HIMANSHU DADHEECH	19	46	B
26	19ETCCS027	HRISHITA BHANDARI	15	36	D+
27	19ETCCS028	HUSSAIN	17	31	D
28	19ETCCS029	JAI KANTHALIA	19	59	A+
29	19ETCCS030	KANISHKA JAIN	18	50	B+
30	19ETCCS032	KRIKA KUMAWAT	20	50	B+
31	19ETCCS033	LAVI VASHISHTH	18	45	B
32	19ETCCS034	LUCKY MURDIA	14	29	E+
33	19ETCCS035	LUTISHT JOSHI	11	41	D+
34	19ETCCS036	MAHENDRA GEHLOT	20	52	A
35	19ETCCS037	MANISH SAINI	13	34	D
36	19ETCCS038	MILIND GOUR	19	46	B
37	19ETCCS039	MUGDHA KUMAWAT	19	55	A
38	19ETCCS040	MUSTANSIR JUKKAR	12	42	C
39	19ETCCS041	NANDESHWARI RANAWAT	19	51	B+
40	19ETCCS042	NAVISHREE JAIN	18	48	B
41	19ETCCS043	NEHA PRASAD HANUMAN	12	38	D+
42	19ETCCS044	PARIDHI SHAH	15	33	D
43	19ETCCS045	PARTHA BISWAS	12	24	E
44	19ETCCS046	PRADHUMN SHARMA	12	28	E+
45	19ETCCS047	PRAGYA SINGH	19	44	B
46	19ETCCS048	PRAJJWAL PALIWAL	11	1	F
47	19ETCCS049	PRANJAL DAK	11	23	F

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48	19ETCCS050	PRANJAL KATHAIT	15	35	D+
49	19ETCCS051	PRIYAL JAIN	18	23	E+
50	19ETCCS052	PRIYANSHU UPADHYAY	8	24	F
51	19ETCCS053	RITIKA JAIN	19	46	B
52	19ETCCS054	RIYA SHARMA	14	63	A+
53	19ETCCS055	SAKSHI	15	45	C+
54	19ETCCS056	SAMEER	10	22	F
55	19ETCCS057	SANJANA	18	51	B+
56	19ETCCS058	SANSKRUTI	18	42	C+
57	19ETCCS059	SANYAM	19	28	D
58	19ETCCS060	SAURABH	10	29	E
59	19ETCCS061	SAURABH SISODIA	20	62	A++
60	19ETCCS062	SAYYAD SARFRAZ	15	15	F
61	19ETCCS063	SHARMA JIGNESH	14	31	D
62	19ETCCS064	SHIVALIKA	15	30	D
63	19ETCCS065	SHIVANSH			
64	19ETCCS066	SHREYA	19	54	A
65	19ETCCS067	SOUMYA	19	54	A
66	19ETCCS068	SUHANI	18	55	A
67	19ETCCS069	TAHER	8	34	E+
68	19ETCCS070	TANU SHARMA	14	44	C+
69	19ETCCS071	TARANUM	8	28	E
70	19ETCCS072	TARUN KUMAR	14	28	E+
71	19ETCCS073	TUSHAR	11	2	F
72	19ETCCS074	UDIT	19	63	A++
73	19ETCCS075	UTKARSH	18	42	C+
74	19ETCCS076	VAIBHAV BHATNAGAR	19	38	C
75	19ETCCS077	VAIBHAV MISHRA	20	54	A
76	19ETCCS078	VAIBHAVRAJ NATH	20	42	C+
77	19ETCCS079	VINISHA JAIN	12	21	F
78	19ETCCS080	VIPUL KUMAR TAMBOLI	19	45	B
79	19ETCCS081	VISHWAJEET	12	39	D+
80	19ETCCS082	VIVEK	12	14	F
81	19ETCCS083	VYSHNAVI	14	47	C+
82	19ETCCS084	YASHMITH	18	33	D+
83	19ETCCS085	YOGESH	14	32	D
84	19ETCCS086	YOGIK	12	14	F

Comp. Prog. &	85.54%	83	71	12
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