



DCU-003-1021002

Seat No. _____

P. G. D. C. A. (Sem. I) (CBCS) Examination

August - 2022

**CS-02 : Problem Solving Methodologies &
Programming in C**

Faculty Code : 003

Subject Code : 1021002

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

1	(a) Objective type questions :	4
(1)	What is flowchart?	
(2)	_____ is a way to convert a variable from one data type to another data type.	
(3)	The format identifier %d is also used for _____ data type.	
(4)	The identifier is not user-defined word. (True/False)	
(b) Explain Constants.	2	
(c) What is variable? Explain in detail.	3	
(d) Write a note on Data types in C.	5	
2	(a) Objective type questions :	4
(1)	Who developed C language?	
(2)	&& is _____ operator.	
(3)	How many bits occupies by character data type?	
(4)	Which function is used to reads the input data from the console?	
(b) Explain Dry-run and its use.	2	
(c) Give difference between traditional and modern C.	3	
(d) Explain Pre-Processors in C.	5	

3	(a) Objective type questions :	4
	(1) What is loop?	
	(2) List out name of jumping statements.	
	(3) Give syntax of for loop.	
	(4) Ternary operator is represented by _____ and _____ symbols.	
	(b) Explain goto statement.	2
	(c) Explain switch... case in brief with an example.	3
	(d) Explain iterative statements with example.	5
4	(a) Objective type questions :	4
	(1) _____ is also known as exit control loop.	
	(2) Give syntax of while loop.	
	(3) What is use of continue statement?	
	(4) Give syntax of simple if statement.	
	(b) Explain break statement.	2
	(c) Write a program to input a year from keyboard and check entered year is leap year or not.	3
	(d) Explain else if ladder statement with example.	5
5	(a) Objective type questions :	4
	(1) Which function returns the difference in seconds between two time objects?	
	(2) What is void Data type?	
	(3) List out I/O formatting functions.	
	(4) Give syntax of strcmp().	
	(b) Explain strcat() function.	2
	(c) Explain Storage class with example.	3
	(d) Write a note on Recursion.	5

6 (a) Objective type questions : 4

- (1) Which function is used to deallocate the previously allocated space?
- (2) By using _____ function we can clear the data from console.
- (3) What is use of ceil() ?
- (4) Which function returns the absolute value of a floating-point number?

(b) Give difference between call by value and call by reference. 2

(c) List out string function and explain any one in detail. 3

(d) List out types of UDF and explain any two with example. 5

7 (a) Objective type questions : 4

- (1) Array index starting from _____
- (2) A union can be nested in a structure _____ (True/False)
- (3) Which keyword is used to define structure?
- (4) An array that uses more than two subscript is referred to as _____ array

(b) Explain malloc() & calloc(). 2

(c) Explain string array with example. 3

(d) Explain Nested structure with example. 5

8 (a) Objective type questions: 4

- (1) What is Array?
- (2) _____ is a variable, also known as locator or indicator that points to an address of a value.
- (3) What is use of realloc() function?
- (4) Which operator is used to access a member element of structure?

(b) Explain use of Arrays in Programming. 2

(c) Give difference between Structure & Union. 3

(d) Explain types of Arrays with suitable example. 5

9 (a) Objective type questions : **4**

- (1) argc stands for _____
- (2) Give syntax of rename()
- (3) What is use of perror() ?
- (4) Which function stores the current position of stream into the object pointed to by pos?

(b) List out file opening mode. **2**

(c) Explain fseek(), rewind(), fflush(). **3**

(d) Explain Pointer to Array with example. **5**

10 (a) Objective type questions : **4**

- (1) What is use of getw() function?
- (2) Which function is used to find the end of a file?
- (3) Which function is used to read character set i.e. strings from the file?
- (4) What is vsprintf() ?

(b) Explain pointer to pointer. **2**

(c) Explain Pointer within array. **3**

(d) Explain Command line arguments with suitable example. **5**
