



BRAINWARE UNIVERSITY

Term End Examination 2023
Programme – B.Tech.(RA)-2022

Course Name – Programming for Problem Solving
Course Code - ESCR201
(Semester II)

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Barasat, Kolkata - 700 106

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Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Identify name having a few letters, numbers and special character '_' is called
- a) keywords
 - b) reserved keywords
 - c) tokens
 - d) identifiers
- (ii) When function call itself, define it is a concept of
- a) loop
 - b) iteration
 - c) function
 - d) recursion
- (iii) identify which of the following operator is used to access elements of a structure (without pointer)?
- a) dot
 - b) arrow
 - c) direction
 - d) indirection
- (iv) Select the use of the bitwise OR operator
- a) set the desired bits to 1
 - b) set the desired bits to 0
 - c) divide numbers
 - d) multiply numbers
- (v) Estimate the number of operand/s is/are required for using modulo operator?
- a) 1
 - b) 2
 - c) 3
 - d) 4
- (vi) Estimate the elements of an array stored in
- a) contiguous manner
 - b) non-contiguous manner
 - c) random manner
 - d) all of the mentioned
- (vii) Select the correct option for the following An array elements are always stored in _____ memory locations.?
- a) Sequential
 - b) Random

- c) Sequential and Random
(viii) Classify the type short int in C programming?
a) The basic data type of C
b) Qualifier
c) Short is the qualifier and int is the basic data type
d) All of the mentioned
- (ix) Identify Which of the following declaration is not supported by C language?
a) String str;
b) char *str;
c) float str = 3e2;
d) Both a and b
- (x) Identify the true option, If p is an integer pointer with a value 1000, then what will the value of p + 5 be?
a) 1020
b) 1005
c) 1004
d) 1010
- (xi) Identify Which of the following best defines the use of continue keyword?
a) Terminate the loop
b) Terminate the program
c) Terminate the current iteration and move to next iteration
d) Restart iteration from the very first iteration
- (xii) In C language, identify the data type of FILE?
a) int
b) char *
c) struct
d) All of the mentioned
- (xiii) Define #include<stdio.h><stdio.h></stdio.h>
a) Preprocessor directive
b) Inclusion directive
c) File inclusion directive
d) None of the mentioned
- (xiv) Identify String represented in memory in C?
a) An array of characters.
b) The object of some class.
c) Same as other primitive data types.
d) LinkedList of characters.
- (xv) Identify the example of iteration in C?
a) for
b) while
c) do-while
d) all of the mentioned

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Classify data types available in C programming language. (3)
3. Explain the types of C instructions (3)
4. Write a C program to compute the sum of the first 10 natural numbers (3)
5. Explain the difference between iteration and recursion with proper example. (3)
6. Define a sequential access file. (3)

OR

Define Null pointer. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Describe a computer system with suitable block diagram. (5)
8. Explain recursion. Explain how the recursion works. (5)
9. Explain the difference between an array and a structure. (5)
10. Explain exit controlled loop in 'C' with proper example. (5)
11. Write a C Program to Count the Number of Vowels and Consonants in a Sentence. (5)
12. Write a program to sort an array in Ascending Order. (5)

OR
Explain the difference between for and while loop.

(5)

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