16627

BRAINWARE UNIVERSITY

LIBRARY
Brainware University
Barasat, Kolkata -700125

Term End Examination 2025-2026
Programme – B.Tech.(CSE)-2024/B.Tech.(CSE)-AIR-2024/B.Tech.(CSE)-2025/B.Tech.(CSE)-AIML-2025/B.Tech.(CSE)-AIR-2025
Course Name – Programming for Problem Solving
Course Code - BES00006
(Semester I)

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 the input unit.
a) Key board b) Speaker
c) Monitor d) Printer

(ii) Select the correct option to comment out single-line.
a) /* */ b) //
c) * * d) \

(iii) Select the primary memory from the following.
a) RAM b) Hard Disk
c) Pendrive d) CD

(iv) Select the option that has a part "Arithmetic Logic Unit".
a) Memory b) Central Processing Unit
c) Input device d) Output device

(v) Identify the invalid declaration in C language.
a) int 2roll b) int roll
c) int Roll d) int roLL

(vi) Choose the correct one from the following for preprocessors in C.
a) #ifdef b) #define
c) #endif d) all of the mentioned

(vii) Choose from the following option for sizeof(char) in byte in a 32-bit C compiler.
a) 1 bit b) 2 bits
c) 1 Byte d) 2 Bytes

(viii) Select the size of the following structure: struct book{ char name[10]; };
a) 1 b) 10
c) 20 d) 11

248 - 1046

(ix) Select another name of 2D integer array.

a) matrix
b) vector
c) Both matrix & vector
d) None of these

(x) Select correct answer, the Number of elements at "int arr[2][2]".

a) 2
b) 4
c) 8
d) 6

(xi) Choose the correct option used to enclose a String in C .

a) ' '
b) " "
c) [ ]
d) < >

(xii) Identify the index of the last element in an array of size n.

a) n-2
b) n
c) n-1
d) 0

(xiii) Choose the option that is used to find the end of a file.

a) END
b) EOF
c) PTR
d) ER

(xiv) Select the meaning of "w" mode in file.

a) reading only
b) both reading and writing
c) writing only
d) editing

(xv) Choose the correct answer for a function with no return value in C.

a) int function()
b) void function()
c) char function()
d) float function()

Group-B

(Short Answer Type Questions) 3 x 5=15

2. Develop a program in C to print 1 to 10 using for loop. (3)
3. Explain 2D array in C with suitable example. (3)
4. Write down the advantages of using structures in C. (3)
5. Illustrate the advantages of function. (3)
6. Explain nesting of if-else statements in C. (3)

OR

Explain Nested-for loop with Example. (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Explain recursion and provide a C program to calculate the factorial of a number using recursion. (5)

8. Differentiate the use of break and continue in loops with examples. (5)

9. Explain call by reference in C programming with example. (5)
10. Explain switch case in C programming with suitable example. (5)

11. Compare between flowchart and algorithm. (5)
12. write an algorithm for (i) Simple interest calculations (ii) Largest of two numbers. (5)

OR

Write a program in C to swap the values of 2 variables. (5)

LIBRARY
Brainware University
Barasat, Kolk...