

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCA DEGREE EXAMINATION MAY 2024
(First Semester)

Branch - COMPUTER APPLICATIONS

PRINCIPLES OF COMPUTER PROGRAMMING

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Who is the father of C language? a) Steve Jobs b) Billgates c) Dennis Ritchie d) James Gosling	K1	CO1
	2	_____ is the datatype that only accepts whole numbers i.e 0 to 9 a) Double b) Char c) Float d) Int	K2	CO1
2	3	What is #include <stdio.h>? a) Preprocessor directive b) Inclusion directive c) File inclusion directive d) Exclusion directive	K1	CO1
	4	Find the output for the following: int main() { int a = 1; if (a==1) printf("True"); a) True b) False c) Error d) No output	K2	CO1
3	5	Group of elements having same data type is known as _____ a) Array b) Structure c) Class d) Union	K1	CO1
	6	How do you initialize an array in C? a) int arr[3] = (1,2,3); b) int arr(3) = {1,2,3}; c) int arr[3] = {1,2,3}; d) int arr(3) = (1,2,3);	K2	CO1
4	7	Pointers are of _____ data type a) Integer b) character c) unsigned d) Signed	K1	CO2
	8	Wrapping up of data and functions together is known as _____ a)Abstraction b)Encapsulation c)Inheritance d) Polymorphism	K2	CO2
5	9	The mechanism that allows a class to inherit properties and behaviors from another class ____ a)Abstraction b)Encapsulation c)Inheritance d) Polymorphism	K1	CO1
	10	_____ is special member function that contains same as class name a)Constructor b) Destructor c) Friend d) Void	K2	CO1

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Illustrate the Arithmetic Operations in C.	K2	CO1
	(OR)			
	11.b.	Interpret the declaration and initialization of Variables		
2	12.a.	Construct a program using memory addressing to illustrate the pointers.	K3	CO2
	(OR)			
	12.b.	Write a program to apply the concept of two dimensional array for subtraction of two matrices.		
3	13.a.	Examine the Fibonacci series of a Number using Recursion function.	K4	CO3
	(OR)			
	13.b.	List out the operators that cannot be overloaded.		
4	14.a.	Make use of Data abstraction in C++ and explain.	K3	CO4
	(OR)			
	14.b.	Utilize the different types of File modes in C		
5	15.a.	Analyze the Friend function in C++.	K4	CO5
	(OR)			
	15.b.	Compare Single inheritance and Multilevel inheritance.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Simplify the process of execution of C Program.	K4	CO3
2	17	Compare one dimensional and two dimensional arrays and Write a Program to manipulate the multiplication of two matrices.	K4	CO5
3	18	Analyze the concept of Polymorphism with Overloading Binary operators.	K4	CO3
4	19	Examine the concept of Function overloading and example.	K4	CO5
5	20	Write a Program to analyze a EB bill calculation using Multiple inheritance.	K4	CO3