

**BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY**  
**QUESTION BANK**  
**Unit Test-II**

**Program: - Computer Engineering Group**  
**Course Title: Programming in c (PIC )**  
**Course Abbr & Code:-PIC (312303)**

**Program Code : CM/IF**  
**Semester: - II**  
**Scheme: K**

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**CHAPTER-3 Array and Structure.(CO3)**

**2 Marks**

- 1 Define structure.Give syntax of declaring it.
- 2 .How to declare and initialize one dimensional array?
- 3 Define character array?
- 4 Define two dimensional array?How is it declared and initialized?
5. Declare and define a structure having member variables as emp\_id,emp\_name,salary.
6. Define typedef.

**4 Marks**

7. Declare structure 'employee' having data members as name,street and city.Accept this data for three employees and display accepted data.
- 8 Implement a C program to accept ten numbers in an array. Sort array elements and display it.
9. State difference between array and structure.
- 10 Define array of structure?Explain with example.
- 11.Explain enumerated data types with example ?

**CHAPTER-4 Functions(CO4)**

**2 Marks**

- 12 Define function and need of function?
- 13.Define recursion with example.
- 14.List different categories of function.
- 15.Enlist storage classes in 'c'.
- 16.State difference between call by value and call by reference.
17. Define i) calloc() ii) malloc() iii) getchar iv) putchar

**4 Marks**

18. Implement a C program to find product of two numbers using function.

19. List string handling functions. Describe any two.
20. Implement a C program to print Fibonacci series starting from 0, 1.
21. Implement a C program to read two strings and find whether they are equal or not.
22. Implement a C program to calculate factorial of a number using function.

### **CHAPTER-5 Pointer(CO5)**

#### **2 Marks**

23. Explain `int *ptr`.
24. State the use of `&` and `*` operator with respect to pointer.
25. Define pointer with declaration and initialization.

#### **4 Marks**

26. Implement a program using pointer to swap two numbers.
27. Define advantage of using pointer.
28. Implement a program which shows pointer arithmetic.
29. Explain array of pointer with example.
30. Explain structure using pointer with example.
31. Implement a program to print value and address using pointer.
32. Write output for the following programming code:

```
#include<stdio.h>

#include<conio.h>

void main()

{

    int x,y,a,b,*P1,*P2;

    x = 10;

    y = 20;

    P1 = &x;

    P2 = &y;

    a = *P1 * *P2 + 20;

    b = *P1 * *P2 - 20;

    printf("x=%d, y = %d", x,y);

    printf("a=%d, b = %d", a,b);

}
```

