

**Internal Examination – I**

**Department of Computer Science and Engineering**

Branch : CSE Date: 11-02-17

Semester : 2<sup>nd</sup> Semester Time: 2.00 pm to 5.00 pm Max. Marks: 100

Subject Code & Title: CS6202 - Programming and Data Structures - I

Staff in charge: B.Sathishkumar

**Part – A Answer All the questions (5 x 2 =10 Marks)**

1. Define function with example.
2. With the help of the printf function show how C handles functions with Variable number of arguments.
3. Define an array. Give an Example.
4. Define the need for Structure in C.
5. Give two examples of preprocessor with example.
6. Difference between while and do while statement in C.
7. Define inline function with an example.
8. Give applications in which unions rather than structures can be used.
9. What is a Pointer?. How a variable is declared as a pointer?
10. List out the four advantages of Pointer?

**Part – B Answer All the questions (40 Marks)**

11. a) 1. Explain any 3 control statements in C with example. (8)  
2. Explain the detail about Array with example. (8)

**Or**

b) 1. Write a suitable C program for passing an array as an argument to the functions. (8)

2. Explain in detail about Pointers with example. (8)

12. a) 1. Write a suitable C program for passing a structure as an argument to the functions. (8)

2. Write short notes for Nested Structures and Union

**Or** (8)

b) Explain in detail function of per processor with suitable example. (A/M-15) (16)

13. a) 1. Explain any 3 Conditional Statements in C with example.

2. Write a C program for matrices multiplication. (8)

14. a) 1. Write a C program that uses function to perform the following operations using structure. (16)

1. Read 2. Write 3. Addition. 4. Multiplication

**OR**

b) 1. State the advantage and disadvantage of Structure and Union with example. (8)

15. a) 1. Briefly discuss about Function with number of arguments and Function Pointers. (N/D-14) (16)

**OR**

b) 1. Write a C program to multiply two matrices that are represented as pointers. Use a function pointer to the function Multiply which takes the two matrices as parameter and prints result of the multiplication (A/M-14) (16)