



**KARNATAKA STATE OPEN UNIVERSITY**  
**MANASA GANGOTHRI MYSORE-570006**

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**DEPARTMENT OF STUDIES IN COMPUTER SCIENCE**

**MSc-CBCS- Computer Science**

**First Semester**

**ASSIGNMENT QUESTIONS**

**Instructions:**

**NOTE: You are required to read the following instructions carefully before you answer.**

1. Write the *Roll Number, Name and Title of the course* at the beginning of your answer of each subject.
2. You should answer *all Questions under* each paper.
3. You should write the assignment in a long hard bond note book (all subjects in one book only)
4. Assignments without **Roll No. and Name** will be rejected.
5. After writing the assignment, send it to the address given below.
6. Assignment cover should be superscribed by “**Assignment for MSc-Computer Science –First Semester**” and write your **Roll number and Name.**
7. Your assignment should reach to:

**Smt Suneetha**  
**Chairperson & Assistant Professor**  
Department of Studies in Computer Science,  
Karnataka State Open University,  
Mukthagangothri, Mysore-570006.

8. **Assignments should reach us on or before ...July 15<sup>th</sup> 2022**

The assignments received after the last date will be summarily rejected. No further extension is allowed. Also browse the website [www.ksoumysuru.ac.in](http://www.ksoumysuru.ac.in) for further details-(Timetable for contact program will be hosted shortly).

9. Assignment sent to any other address of the University will not be valued.

10. The students are **ADVISED TO KEEP A COPY OF THE ASSIGNMENTS** with them and submit it in case the University demands the same.

**Max Marks :20**  
**(10x2) =20**

**Answer the following questions from each Course**

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**Course: MCSDSC-1.1 Advanced Data Structures with Algorithms**

1. Briefly Explain practical complexities in algorithm.
2. What is NP completeness polynomial Time? Explain

**Course: MCSDSC-1.2\_OOPs with Java**

1. What are the Salient Features of Java? Explain each features
2. What is the function of Stream Tokenizer class?

**Course: MCSDSE-1.5 Computer Architecture**

1. Briefly explain arithmetic and logic unit
2. Explain interconnection network domain.

**Course: MCSDSE-1.6 Advanced C programming**

1. Briefly explain different types of functions
2. Write a short note on types of preprocessors

**Course: MCSDSE-1.7 Computer Graphics**

1. Explain DDA algorithm.
2. Explain graphic input devices.

**Course: MCSDSE-1.8 Operating System**

1. Explain Process state diagram and PCB.
2. In detail explain paging technology.

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**LAB questions**

**(5x2)=10**

**a) MCSDSC-1.3 Lab Advanced Data Structures with Algorithms**

1. Write a program Fibonacci series using recursive function.
2. Implement and analyze Traveling salesperson problem.

**b) MCSDSC-1.4\_LAB OOPs with Java**

1. Program to define a structure of a basic JAVA program
2. Program to define class, methods and objects. Demonstrate method overloading.