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 separately with regard to each paper.
4. Assignments without Roll No. and Name will be rejected.
5. After writing the assignment, you should tag the assignment together, put them in a cover and send it to the address given below(Preferably in a long book).
6. Assignment cover should be superscribed by “Assignment for MSc-Computer Science –Second Semester” and write your Roll number and Name.
7. Your assignment should reach to:
   Smt. Sumati Ramakrishna Gowda,
   BE(CS&E)..MSc(IT)..MPhil(CS)..(PhD).,
   Programme Co-ordinator, / Lecturer,
   Department of Studies in Computer Science,
   Karnataka State Open University,
   Manasagangothri, Mysore-570006.

8. Assignments should reach us on or before ...30th September 2011.
   The assignments received after the last date will be summarily rejected. No further extension is allowed. Also browse the website www.ksoumysore.edu.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.
Note: Test will be conducted for TEN marks during the contact program for all the subjects.

Max Marks=15

Answer the following questions from each Course

Course : 7 MSCS-507 Analysis and Design of Algorithms

1. Analyze the time complexity of insertion sort algorithm.
2. Explain the Prim’s algorithm to solve minimum cost spanning problem.
3. Describe LIFO, FIFO searches and illustrate.

Course : 8 MSCS-508 DBMS

1. Describe the tree data structure.
2. Explain database design and querying tools supported by ORACLE.
3. Define Canonical cover. Give an algorithm to obtain it.

Course : 9 MSCS-509 Linux Internals

1. Define the system call. Explain the classification of system calls.
2. Define process and explain context switch with an example.
3. Discuss any two serial ports.

Course : 10 MSCS-510 Computer Networks

1. Explain with a neat diagram ATM protocol reference model with its planes.
2. Explain the design issues of data link layer and its services.
3. Explain the working of video compression.

Course : 11 MSCS-511 Practical-3 : ADA & DBMS

1. Write a program in ADA to illustrate Edge in a weighted graph.
2. Write a program in ADA to illustrate iterative code for container loading by backtracking.
3. Create a view, which contains employee names and their manager names working in sales department in DBMS
4. Determine the names of employee, who earn more than their managers in DBMS.

Course : 12 MSCS-512 Practical-4 : Linux Internals & Network Programming

1. To create a new partition of memory
2. To create a Physical Volume
3. Creation of thread
4. Shared Memory concept

Smt. Sumati Ramakrishna Gowda,  
BE(CS&E), MSc(IT), MPhil(CS), (PhD),  
Programme Co-ordinator, / Lecturer,  
Department of Studies in Computer Science,  
Karnataka State Open University,  
Manasagangotri, Mysore-570006.