

SPRING – 2016 - ASSIGNMENT

PROGRAM	MCA(REVISED FALL 2012)
SEMESTER	FOURTH
SUBJECT CODE & NAME	MCA4040- ANALYSIS AND DESIGN OF ALGORITHM
CREDIT	4
BK ID	B1480
MAX. MARKS	60

Answer all the questions

Q. No.	Questions	Marks	Total Marks
1	Write the steps involved in analyzing the efficiency of non-recursive algorithms.	10	10
2	Define selection sort and explain how to implement the selection sort?	3+7	10
3	Define Topological sort and explain with an example.	5+5	10
4	Explain good-suffix and bad-character shift in Boyer-Moore algorithm.	5+5	10
5	Solve the Knapsack problem using memory functions. Item 1 2 3 4 Weight 2 6 4 8 Value (in Rs.) 12 16 30 40 Knapsack capacity is given as $W=12$. Analyze the Knapsack problem using memory functions with the help of the values given above.	10	10
6	Describe Variable Length Encoding and Huffman Encoding.	5+5	10