

**MCSL-216 (Set-4)**  
**MASTER OF COMPUTER APPLICATIONS**  
**(MCA-NEW)**  
**DAA and Web Design Lab**

Duration : 2 hours

Maximum Marks : 50

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Note: 1. This question paper comprises of two Compulsory Questions, each of 20 marks.

2. Rest 10 marks are for viva-voce.

1. (a) Implement Fractional Knapsack algorithm and find out optimal result for the following problem: 10  
( $P_1, P_2, P_3, P_4, P_5$ ) = (15, 5, 20, 8, 7)  
( $W_1, W_2, W_3, W_4, W_5$ ) = (3, 4, 6, 8, 2)  
Maximum Knapsack capacity = 20
- (b) Implement Merge sort algorithm to sort the following list of numbers: 10  
200, 150, 50, 100, 25, 75, 10, 5
2. Design a form for student satisfaction survey for various course offered by some department of some University. The form should have relevant fields (make suitable assumptions). The form should have submit and reset button. Now, perform the following: 20
- (a) Use java script to validate all the fields in the form.
- (b) Submit button should enter the data of fields in the database.

- (c) Error message should be shown if text field is left blank.
- (d) Reset button should reset all the fields to blank.

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