

## REVIEW PAGE 4

### (5) BACKTRACKING ALGORITHMS

SUBJECT: UNDERSTANDING HOW TO DESIGN AND APPLY THE BACKTRACKING METHOD; UNDERSTANDING RELATED CONCEPTS (SPACE STATE TREE, WORST-CASE PERFORMANCES)

#### TESTING METHODS:

- GIVEN NEW PROBLEM, DRAW SPACE STATE TREE FOR AN INSTANCE AND SIMULATE BACKTRACKING.
- WRITE A BACKTRACKING PROCEDURE FOR A NEW PROBLEM.

### (6) BRANCH-AND-BOUND

SUBJECT: UNDERSTANDING HOW TO DESIGN AND APPLY BRANCH-AND-BOUND METHOD; UNDERSTAND RELATED CONCEPTS (SPACE STATE TREE, BOUNDING STRATEGIES ETC.)

#### TESTING METHODS:

- GIVEN NEW PROBLEM AND BOUNDING STRATEGY, DRAW SPACE STATE TREE AND SIMULATE B&B.
- APPLY BREADTH-FIRST AND BEST-FIRST STRATEGIES
- SUGGEST BOUNDING STRATEGIES/ALGORITHMS