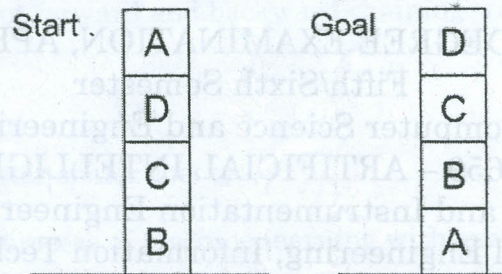




PART – B

(5×13=65 Marks)

11. a) Consider the Blocks World problem with four blocks A, B, C and D with the start and goal states given below.



Blocks World

Assume the following two operations : Pick and a block and put it on table, pick up a block and put it on another block. Solve the above problem using Hill Climbing algorithm and a suitable heuristic function. Show the intermediate decisions and states.

(OR)

- b) List and describe the problem characteristics that need to be considered for selecting appropriate heuristics for a given class of problems.

12. a) Consider the following facts :

- Steve only likes easy courses.
- Science courses are hard.
- All the courses in the HaveFun department are easy.
- BK301 is a HaveFun department course.

Use resolution to answer the question "What course would Steve like" ?

(OR)

- b) Consider a two player game in which the minimax search procedure is used to compute the best moves for the first player. Assume a static evaluation function that returns values ranging from -10 to 10, with 10 indicating a win for the first player and -10 a win for the second player. Assume the following game tree in which the static scores are from the first player's point of view. Suppose the first player is the maximizing player and needs to make the next move. What move should be chosen at this point ? Can the search be optimized ?

