MINOR EXAMINATION – 2019
B.TECH 7th SEM
Artificial intelligence

Course Code: CSE 401 Max Marks: 20
Time: 1 Hrs.

Section - A

Note: Attempt any three questions. All Questions are of equal marks.

Q.1 List the steps in the Hill Climbing Algorithm to find a path in a search space? What are the limitations of Hill Climbing search?

Q.2 Why does search in game-playing always proceed forward from the current position rather than backward from the goal? Why are the search results from one move to next usually saved? Explain.

Q. 3 Solve Missionaries and Cannibals problem using state space representation?

Q. 4 Using constraint satisfaction procedure solve the following crypt- arithmetic problem.

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   E A T
+  T H A T
 A P P L E
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Section - B (Compulsory)

Q.5. Write ***A* algorithm***. Apply A* algorithm on the following graph: Values at each node is the estimated heuristic cost from that node to goal node (ie. $h(n)$ *value*) and values at each edge are the g(n) value (distance between nodes). Node '1' is a initial node and node '6' is a goal node.