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B.E. Semester-VI
MID-SEM EXAMINATION

Date : Saturday, 28/02/2015 Branch : CE-IT
Subject Code: CE-IT 602 Subject Name : Artificial Intelligence
Time : 10 AM to 11.30 AM Max. Marks : 30

Instructions:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Use of scientific calculator is permitted.
- 4) Indicate clearly, the options you attempt along with its respective Que.No.
- 5) Use the last page of main supplementary for rough work.

Q.1(A) Define AI. What are the task domains of AI? 10

Q.1(B) What do you mean by state space representation of a problem? Illustrate how you can represent following water jug problem as a state space search: There are two jugs (without any measuring marks on them) of 4 and 3 liters capacity, respectively. There is a tap of water to fill the jugs. The objective is to fill the 4-liter jug with exactly 2 liter of water.

Q.2(A) Explain Uninformed Search Technique. 05

Q.2(B) Solve the following. 05

S E N D
+ M O R E
M O N E Y

OR

Q.2(B) What is local maximum, Plateau and Ridge and how to deal with this problem? Explain the block world problem by using local and global heuristic function. 05

Q.3(A) Explain Cut and fail predicate with example. 05

Q.3(B) Explain AO * algorithm in detail 05

OR

Q.3(A) (1) What is Hill Climbing? Explain Simple Hill Climbing. 05
(2) Write a program to demonstrate input-output predicate.

Q.3(B) Explain A* algorithm in detail. 05

-----Best of Luck-----