

05/06/2017

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## **TCS-801/TIT-801**

**B. Tech. (CS/IT) (Eighth Semester)**  
**Mid Semester EXAMINATION, June, 2017**  
**ARTIFICIAL INTELLIGENCE**

*Time : Two Hours ]*

*[ Maximum Marks : 60*

**Note : (i) This question paper contains *three* questions with alternative choice.**

**(ii) All questions are compulsory.**

**(iii) Each question carries four Parts (a), (b), (c) and (d). Attempt either Parts (a) and (b) *or* (c) and (d) of each question.**

**(iv) Each Part carries **ten** marks. Total marks assigned to each question are **twenty**.**

1. (a) What are the different problems solving techniques ? Explain Alan Turing Test.
- (b) What is Intelligence ? Give the components of intelligence.

*Or*

- (c) What is Artificial Intelligence ? What are the applications of Artificial Intelligence ?

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- (d) What is the difference between BFS and DFS ? Explain water jug problem.
- 2. (a) What is informed search and uninformed search ? Explain any *two* algorithms of each.
- (b) Explain the parsing techniques with example.

*Or*

- (c) What is Context Free Grammar ? What is the difference between Context Free Grammar and Transformational Grammar ?
- (d) Explain Fillmore's grammar.
- 3. (a) Explain Hill Climbing search. Discuss the problems for Hill Climbing.
- (b) What is game playing ? Explain min-max algorithm.

*Or*

- (c) Explain A\* Algorithm with Example.
- (d) What is Heuristic ? Explain Best First Algorithm.