Module1 QB

1)Give the 8 definitions of AI

2) Explain definitions of AI organized as four categories

3) Who proposed Turing Test?

4) "A computer passes the test in Turing Test" Justify.
5) Elaborate the capabilities required by the most of the AI systems.
6) Is Cognitive Science an interdisciplinary field ? Justify
7) Explain laws of thought approach
8) Are there any obstacles for laws of thought approach? Justify
9) What is an agent?
10) Differentiate between agent and program
11) What is an rational agent?
12) What is an intelligent agent?
13) Illustrate the concept of an agent.
14) Differentiate between agent program and agent function
15) How to select a performance measure for doing right thing by an rational agent? Explain
16) Elaborate on the criteria's used by rationality which leads to an rational agent with an example.
17)Can a rational agent involve omniscience? Justify
18)Define terms

i. Information Gathering
ii. Exploration
iii. Learning
iv. Autonomy

18) Describe specifying a task environment for an rational agent
19) Give PEAS description of the task environment for an automated Taxi driver
20)Elaborate on the properties of task environment
21) Illustrate trivial agent program that keeps track of the percept sequence and a table of actions to decide
22)Name the four basic kinds of agent programs
23) Illustrate simple reflex agents
24)Illustrate Model based reflex agents
25)Illustarte Goal Based Agents

26)Illustrate Utility based agents
27)Illustrate Learning agents
28) Elaborate on a generic knowledge-based agent.
29) Define terms

i. Knowledge Base
ii. Knowledge Representation Language
iii. Axiom

30)How to :
i) add sentences to KB?
ii) and query to the knowledge base ?
31) Distinguish between declarative and procedural approach
32)Illustrate Wumpus world with PEAS Task environment description
33) Define following terms with respect to Logic:

i. Syntax
ii. Semantics
iii. Possible World
iv. Model
v. $\alpha \models \beta$

34) If α_1 = "[1,2] is safe" in Wumpus world KB, Prove $KB \models \alpha_1$,
35) If α_2 = "[2,2] is safe" in Wumpus world KB, Prove $KB \models / \alpha_2$

36) Elaborate on inference algorithm that derives only entailed sentences
37) Define the terms with respect to propositional Logic

i. Syntax
ii. Atomic Sentence
iii. Complex sentence
iv. Logical Connectives

38)Elaborate on the semantics of Propositional Logic
39)Explain the following with respect to propositional Logic
i) simple knowledge base
ii) Simple inference procedure

40) Write truth-table enumeration algorithm for deciding propositional entailment
41)Differntiate between AI,ML and DL
42)Distinguish between Classification and Regression problems
43)What are 3 different Learning techniques ? Explain
44)Elaborate on AI ethics
45)What is required to become a practitioner in Machine Learning?