**University of Mumbai**

**Examination 2020 under cluster 5 (APSIT)**

Program: BE Information Technology Engineering

Curriculum Scheme: Revised 2016

Examination: Final Year Semester VII

Course Code: ITC703 and Course Name: Artificial Intelligence

Time: 1hour Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

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| Q1.  | Uniform cost search is one of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_technique. |
| Option A: | Informed search |
| Option B: | uninformed search  |
| Option C: | uninformed select |
| Option D:  | Best select |
|  |  |
| Q2. | Input segments of AI programming not contain(s)?  |
| Option A: | sound |
| Option B: | well |
| Option C: | toch |
| Option D: | Smart |
|  |  |
| Q3. | In PEAS, S stands for |
| Option A: | Service  |
| Option B: | Sensor |
| Option C: | Second |
| Option D: | Select  |
|  |  |
| Q4. | BFS is  |
| Option A: | Breadth First search |
| Option B: | Belt free search  |
| Option C: | Box first search |
| Option D: | Backward free Search  |
|  |  |
| Q5. | What is used in determining the nature of the learning problem?  |
| Option A: |  Environment |
| Option B: | Feedback |
| Option C: | Problem |
| Option D:  | Saving |
|  |  |
| Q6. | To which depth does the alpha-beta pruning can be applied? |
| Option A: | 110 states |
| Option B: | 150 states |
| Option C: | 6 States |
| Option D:  | Any depth |
|  |  |
| Q7.  | Which search implements stack operation for searching the states? |
| Option A: | uninformed select |
| Option B: | Depth First search |
| Option C: | Box first search |
| Option D:  | Deep Free search  |
|  |  |
| Q8.  | In N Queen problem  |
| Option A: | N is the number of pieces |
| Option B: | N is the number of queens |
| Option C: | N is the number of boards |
| Option D:  | N is the number of players |
|  |  |
| Q9. | Example of CONSTRAINT SATISFACTION PROBLEMS |
| Option A: | Robot  |
| Option B: | Natural Language Processing |
| Option C: | CRYPTARITHMETIC |
| Option D:  | Image analysis |
|  |  |
| Q10.  | Example of Simple reflex Agent |
| Option A: | Vacuum cleaner |
| Option B: | Taxi driving |
| Option C: | Chess |
| Option D:  | Medical diagnosis system |
|  |  |
| Q11.  |  Choose form the following areas where NLP cannot be useful.  |
| Option A: | Automatic Text Summarization |
| Option B: | Automatic Question-Answering Systems |
| Option C: | Manual |
| Option D:  | Information Retrieval |
|  |  |
| Q12.  | Which algorithm will work backward from the goal to solve a problem? |
| Option A: | Forward chaining |
| Option B: | Backward chaining |
| Option C: | Hill-climb algorithm |
| Option D: | 8 Queen |
|  |  |
| Q13. | In PEAS, P stands for |
| Option A: | Performance |
| Option B: | Plate |
| Option C: | Part |
| Option D:  | pieces |
|  |  |
| Q14.  |  What is the not field of Natural Language Processing (NLP)?  |
| Option A: | Computer Science |
| Option B: | Artificial Intelligence |
| Option C: | Linguistics |
| Option D:  | Information Technology |
|  |  |
| Q15. | If P: it is humid Q: it is hot Then Q => P? |
| Option A: | If it is hot, then it is humid |
| Option B: | It is humid and it is hot |
| Option C: | It is humid but it is hot |
| Option D:  | It is not humid and it is not hot |
|  |  |
| Q16.  | Stack data structure works on |
| Option A: | LIFO |
| Option B: | FIFO |
| Option C: | FILO |
| Option D:  | FOLO |
|  |  |
| Q17. | Conditional probability is also called as |
| Option A: | Depth- First Search |
| Option B: | Posterior probability |
| Option C: | Hill- climbing |
| Option D: | Breadth First Search |
|  |  |
| Q18. | Resolution is  |
| Option A: | A technique of inference |
| Option B: | Heuristic function  |
| Option C: | Searching technique |
| Option D:  | Game Playing  |
|  |  |
| Q19.  | First order logic is also called as  |
| Option A: | Forward chaining |
| Option B: | Predicate logic |
| Option C: | Water jug Logic |
| Option D:  | Hill-climb algorithm |
|  |  |
| Q20. | What is meant by probability density function? |
| Option A: | Increasing complexity |
| Option B: | Decreasing complexity |
| Option C: | Probability distributions for Continuous variables |
| Option D: |  Hill- climbing |
|  |  |
| Q21. | Hierarchical planning is also called as |
| Option A: | Conditional planning |
| Option B: | Forward state-space search |
| Option C: | Backward state-space search |
| Option D:  | plan decomposition |
|  |  |
| Q22.  | Where can the bayes rule be used? |
| Option A: | Solving queries |
| Option B: | Increasing complexity |
| Option C: | Decreasing complexity |
| Option D:  | Answering probabilistic query |
|  |  |
| Q23. | STRIPS in planning is |
| Option A: | STanford Research Institute Problem Solver |
| Option B: | STanford Research Institute Problem Solution |
| Option C: | STanford Regional Institute Problem Solver |
| Option D:  | STanford Regional Institute Programming Solver |
|  |  |
| Q24.  | Inference algorithm is complete only if \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Option A: | It can derive any irrelevant sentence |
| Option B: | It cannot derive any sentence that is an entailed version |
| Option C: | It is not truth preserving |
| Option D:  | It can derive any sentence that is an entailed version & It is truth preserving |
|  |  |
| Q25. | Which algorithm places two actions into a plan without specifying which should come first? |
| Option A: | Full-order planner |
| Option B: | Last -order planner |
| Option C: | Semi-order planner |
| Option D:  | Partial-order planner |