

BE Semester- 7th (Information Technology) Question Bank

(Artificial Intelligence)

All questions carry equal marks (10 marks)

| | |
|------|---|
| Q.1 | What are the Problem Characteristics of Artificial Intelligence? |
| Q.2 | Explain the State Space with the use of Water Jug Problem. |
| Q.3 | Differentiate the DFS and BFS with merits and demerits. |
| Q.4 | What is Hill Climbing? Explain Simple Hill Climbing . |
| Q.5 | Explain the Non-monotonic reasoning. |
| Q.6 | Explain the State Space with the use of 8 Puzzle Problem. |
| Q.7 | Explain the Best-First-Search Procedure with example. |
| Q.8 | Explain the Bayesian Networks. |
| Q.9 | Explain Probability and Bay's Theorem. |
| Q.10 | Solve the following Cryptarithmic Problem. S E N D + M O R E M O N E Y |
| Q.11 | Describe briefly the applications of Neural Networks. |
| Q.12 | Explain A* algorithm. |
| Q.13 | Solve 8 Puzzle problems by any AI Technique. |
| Q.14 | Explain Steepest ascent Hill climbing algorithm. |
| Q.15 | Explain Semantic and Syntactic analysis in NLP. |
| Q.16 | Solve the following Cryptarithmic Problem. B E S T + M A D E M A S E R |
| Q.17 | Explain the algorithm for Back-propagation in Neural Networks. |
| Q.18 | Explain AO* algorithm. |
| Q.19 | Explain semantic net with example. |
| Q.20 | Explain Fuzzy Logic and its application. |
| Q.21 | Describe briefly the applications of AI. |
| Q.22 | Explain Production Systems and Production Characteristics. |
| Q.23 | Discuss Means-Ends Analysis. |
| Q.24 | Discuss Representations And Mappings. |
| Q.25 | Describe different Approaches To Knowledge Representation. |
| Q.26 | Explain Instance And Is a Relationship with example. |
| Q.27 | Write short note on Computable Functions And Predicates. |
| Q.28 | Discuss Procedural Versus Declarative Knowledge. |
| Q.29 | Discuss Forward Versus Backward Reasoning. |
| Q.30 | Explain Rule-Base Systems with example. |
| Q.31 | Explain Dempster-Shafer Theory. |
| Q.32 | Write short note on Semantic Nets. |
| Q.33 | Explain Goal Stack Planning. |

| | |
|------|---|
| Q.34 | Explain Discourse And Pragmatic Processing. |
| Q.35 | Explain Hopfield Network. |
| Q.36 | Explain Connectionist AI And Symbolic AI. |
| Q.37 | Write short note on Expert System. |
| Q.38 | Discuss knowledge Acquisition. |
| Q.39 | Explain Basic List Manipulation Functions In PROLOG. |
| Q.40 | Explain Property Lists & Arrays in PROLOG with example. |