

Seat No. **MAR_APR 2025 SUMMER EXAMINATION****11731 Bachelor of Technology (NEP-2.0)****Sub. Name: Fundamentals of AI****Sub. Code: 86168****Day and Date: MAY ,15-05-2025****Total Marks: 70****Time: 10:30 AM To 01:00 PM****Instructions:**

- Special Inst.:**
- 1. Question no. 6 is compulsory**
 - 2. Solve any four questions from Q. No. 1 to Q. No.5**
 - 3. Assume suitable data wherever necessary**
 - 4. Figures to the right indicate full marks**

- Q1) Solve Following Questions [15]**
- a. Explain what is expert system and what are the applications of expert system? [8]**
 - b. Explain tensor flow (Workflow, installation and sessions). [7]**
- Q2) Solve Following Questions [15]**
- a. What is forecast and how it works. [8]**
 - b. What are the problem faced in Hill Climbing Algorithm? [7]**
- Q3) Solve Following Questions [15]**
- a. Explain the concepts of machine learning and deep learning. [8]**
 - b. Explain what is backward and forward chaining. [7]**
- Q4) Solve Following Questions [15]**
- a. What is knowledge and different types of knowledge representation. [8]**
 - b. Explain what is Bayesian reasoning and why do we need it. [7]**
- Q5) Solve Following Question [15]**
- a. Explain strategies for state space search. [8]**
 - b. Explain what is the relation between probability theory and uncertainty management. [7]**
- Q6) Write short note(Any Two) [10]**

- a. History of AI
- b. Conceptual Graphs
- c. Proportional calculus and predicate logic.

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

- 1] (1154) B.Tech. CBCS (86168) Fundamentals of AI Part 2 SEM 4