SRINIVASA INSTITUTE OF ENGINEERING AND TECHNOLOGY

UGC – Autonomous Institution

III B. Tech II Semester II MID Examinations, MAY -2025

DEEP LEARNING

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Time: 90 Mins Max. Marks: 30 Date: 01.05.2025

| S.No | Note: Answer All Questions | Marks | LEVEL | CO | PO |
|------|--|-------|-------|--------------|---------------|
| 1. | Describe the working of a Boltzmann Machine. How is energy minimized during training? | 10 | K2 | CO 1 | PO 1, PO 5 |
| 2. | (a) List and briefly describe the major types of deep reinforcement learning algorithms. How does it differ from traditional reinforcement learning? (5M)(b) Explain the concept of an agent–environment interaction in Deep Reinforcement Learning with a suitable example. (5M) | 10 | K2 | CO 4 CO 5 | PO 1 |
| 3. | Define Restricted Boltzmann Machines (RBMs). What are their advantages over standard Boltzmann Machines? | 10 | K2 | CO 3 | PO 1, PO 5 |