



A Charutar Vidya Mandal's Institution
V.P. & R.P.T.P. SCIENCE COLLEGE
(AUTONOMOUS) (Grant-in-Aid)
Affiliated to Sardar Patel University
VALLABH VIDYANAGAR-388120



Bachelor of Computer Applications (Semester -5) Internal Examination - 2025
US05SEBCA08 : INTRODUCTION TO ARTIFICIAL INTELLIGENCE

Date: 26/09/25 Day: Friday

Time: 10:45 am To 11:45 am

Total marks :20

Q:1 Multiple Choice Questions:

[06]

1. Which of the following is an example of an AI-related field?
A. Compiler Design
B. Operating Systems
C. Expert Systems
D. Computer Networks
2. Which of the following is a key feature of an Expert System?
A. Random behaviour
B. Can explain its decisions
C. Supports multi-language translation
D. Always requires internet
3. What makes a robot intelligent in AI?
A. Only camera input
B. Ability to store songs
C. Ability to sense, think, and act
D. Large hard disk
4. Which component of a KBS stores facts and rules?
A. User Interface
B. Inference Engine
C. Knowledge Base
D. Explanation Module
5. Which knowledge representation technique includes objects and their properties?
A. Frames
B. Heuristics
C. Neural Nets
D. BFS Trees
6. Which structure is commonly used in semantic networks?
A. Trees
B. Linked Lists
C. Graphs
D. Arrays



Q:2 What is AI? What are the main areas of its application?

[07]

OR

Q:2 What is blind search? Explain Breadth-First Search.

Q:3 What is a Knowledge-Based System (KBS)? Describe the main components of KBS.

[07]

OR

Q:3 How are Knowledge Acquisition and Knowledge Update performed in a Knowledge-Based System (KBS)?



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Bachelor of Computer Applications (Semester-5) Quiz - 2025
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Time: Maximum 10 minutes

Total marks :05

Q-1 Fill in the blanks with appropriate answer.

- i. _____ is known as the Father of Artificial Intelligence.
- ii. Natural Language refers to: _____.
- iii. _____ method uses a heuristic function $h(n)$.
- iv. KBS stands for _____.
- v. Factual Knowledge is also known as _____.

