



SE – 260

**III Semester B.C.A. (Full Stack Development) (AI and ML) (Data Science)**  
**Degree Examination, January/February 2026**  
**(SEP 2024 – 25)**  
**COMPUTER APPLICATION**  
**24BCA 33 : Artificial Intelligence**

Time : 3 Hours

Max. Marks : 80

**Instruction :** Answer **all** the questions.

SECTION – A

Answer **any eight** questions.

(8×2=16)

1. Define Artificial Intelligence.
2. What is Machine Learning ?
3. What is Knowledge in AI ?
4. Define TMS.
5. Write any two applications of computer vision.
6. What is an Expert System ?
7. List the types of Robots.
8. Expand LMD and RMD.
9. What is the Min Max algorithm ?
10. Define Goal based agent.



SECTION – B

Answer **any four** questions.

(4×6=24)

11. Write an algorithm for BFS.
12. Write a neat diagram to define the Wumpus World AI problem.

P.T.O.



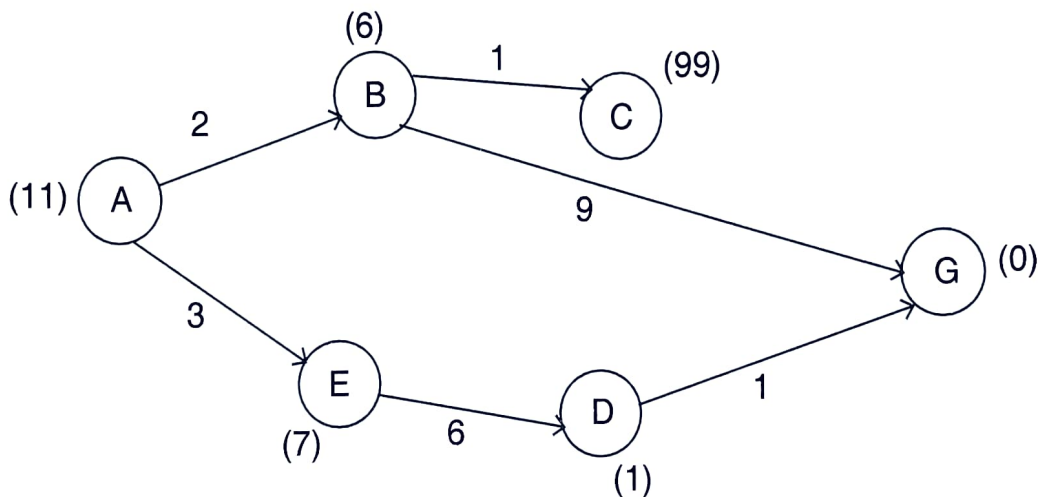
13. Explain block world problems with a neat diagram and action words.
14. What is NLP ? Explain different types of ambiguity in NLP.
15. Explain different types of ML.
16. Write a note on ANN.

## SECTION – C

Answer **any five** questions.

(5×8=40)

17. List and explain any 8 applications of AI.
18. Using A\* algorithm find the optimal path for the following graph. A is the starting point and G is the goal node.



19. Write a note on Predictive Logic and First Order Logic.
20. Explain the architecture of Expert System.
21. Briefly explain five phases of NLP.
22. Write a note on Fuzzy Logic.
23. Discuss Robotics and Computer Visions as major domains of AI.

