

***B.Sc(H) 6<sup>th</sup> Semester Examination ,2021(CBCS)***  
***Paper Name: Artificial Intelligence      Paper Code: CC-13***  
***Subject: Computer Science***

**F.M:40**

**Time: 2 Hrs**

**Answer any *eight* Questions:**

**8x5=40**

- (a) What are intelligent agents? Mention some applications of intelligent agents.
- (b) Briefly explain a typical Expert System with a suitable diagram.
- (c) Write down A\* algorithm of heuristic searching technique.
- (d) What is search space? Define Plateau in context of search space.
- (e) Differentiate between depth first search and breadth first search algorithm.
- (f) Explain Hill climbing searching technique with a suitable example.
- (g) Differentiate between tautology and contradiction with example .
- (h) What is pruning? Explain it with a suitable example.
- (i) Write a program in LISP/PROLOG that computes factorial of a suitable integer.
- (j) Differentiate between forward chaining and backward chaining method of inference.