## ARTIFICIAL INTELLIGENCE & EXPERT SYSTEMS ASSIGNMENT

## FINAL-TERM ASSESSMENT

Marks:10

Mention Name, ID, Course, Section, Serial number in heading. Then write down your solution. Upload the Microsoft word file in Microsoft TEAMS.

Submission Date: Saturday 19/09/2020 10:00 PM (Strict deadline)

Question1: 7 marks

What is Backtracking Search? Describe 2 improvement techniques on Backtracking Search.

[Solve by yourself. Take help from "Artificial Intelligence: A Modern Approach," by Stuart J. Russell and Peter Norvig. Describe in brief. Do not copy from others. This will lead to serious punishment.]

Question2: 3 marks

## Apply Bayes' Rule on below problem

Doctors knows that 60% of the people with **Symptom, S** has **disease, D**. In general, this symptom is found in 10 % population. On the other hand 8% patient has this disease, D.

Now calculate how many patients with **disease**, **D** out of 100 will show the **symptom**, **S**?