1. "Comments represent a failure to express an idea"- describe with an appropriate example. ✓        - 03

2. Let us help a company that is looking to build a robot for cooking. The company wants a simple robot that can simply walk and cook. A user can operate a robot using a set of commands via remote control. Currently, a robot can do three things, it can walk, cook, or can be switched off. The company has set protocols to define the functionality of the robot. If a robot is in an "on" state, you can command it to walk. If asked to cook, the state would change to "cook" or if set to "off", it will be switched off. Similarly, when in the "cook" state it can walk or cook, but cannot be switched off. And finally, when in the "off" state it will automatically get on and walk when the user commands it to walk but cannot cook in the off state.
Design the above-mentioned system with appropriate design pattern. Draw the class diagram and write the code to support your design.        - 10

3. Can you use the use case of the *Memento* design pattern along with the *Command* pattern? If yes, explain with an example.        - 04

4. What is the intent behind the *Observer* design pattern? What are the participants of it?        - 03