* <u>Experiment-9 (PartIal):-</u>

Q.1) What are the applications of expert systems?

Ans:- Expert systems are a branch of artificial intelligence that use knowledge-based approaches to solve complex problems that usually require human expertise. Following are key applications of expert systems:-

i) <u>Medical Diagnosis</u>:- Expert systems like ~~MYCIN~~ MYCIN assist in diagnosing diseases by using the knowledge of symptoms, diseases, and treatment to suggest diagnoses and therapeutic advice.

ii) <u>Financial Services</u>:- Systems such as fraud detection tools analyze transaction patterns to identify potentially fraudulent activities, helping banks and financial institutions reduce risks.

iii) <u>Customer Support</u>:- Expert systems can power helpdesk operations, offering automated solutions to common problems faced by users, thus streamlining customer service.

iv) <u>Engineering</u>:- CAD systems integrate expert systems to offer intelligent advice on design processes, materials selection, and troubleshooting during the engineering design phases.