Answer to the Q. No. 1

Based on the pencived environment an agent to executes some actions. ~~But a rati Thee~~ There may exists a set of action. Among them there's just one optimal, robust and the right logical action to execute. So a national agent is an ~~an~~ intelligent agent that can choose and execute a national or logical action from a set of actions based on pencieved ~~en~~ environment.

~~An~~ Artificial intelligence or AI in short is a general term where it can be anything that can make a machine intelligent. It includes all the aspects like symbolic learning, Machine learning, Computer vision, NLP etc. A Machine learning is a sub field of AI that takes a statistical approach to make decisions based on gained experience. Deep learning is a special sub-field of machine learning that takes a different approach to make machine ~~intell~~ intelligence by mimiking human neural network thus intelligence.

Answer to the Q. No. 2

A knowledge based system that can give certain expertise is called an expert system. Like For example we can think of tumor detectors. These detectors has knowledge about all the tumors so when when a new X-Ray Cam comes these detectors can detect the presence of tumor thus thus provide assists doctors with their do do detection expertise.

There are three main building blocks of an expert system.

1) knowledge base that is the database of the system.

2) Interface engine, helps to interact

3) User interface, to interact with user and provide expertise

Input → User Interface → Rules Engine → knowledge base ← expert knowledge
advice ←

Non-expert user
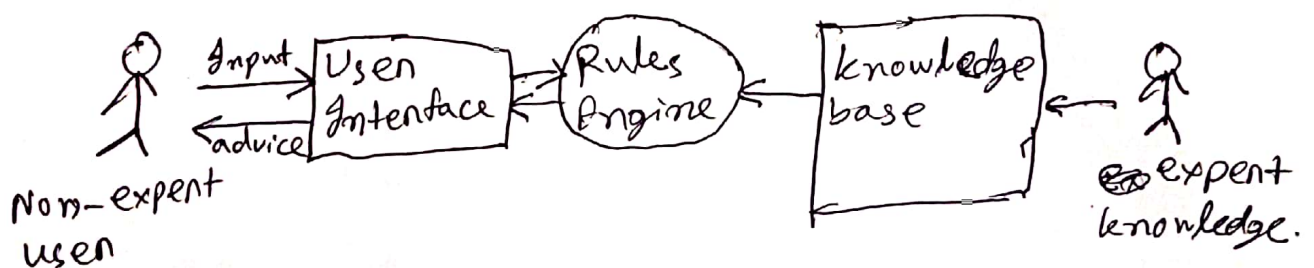
Answer to the Q. No. 3 (a)

PEAS is performance measu, Environment, Actuators, sensong. So PEAS for ⊖Deep Blue Deep Blue is given below:

i) Performance messures: Winning the game

ii) Environment : Chess board, Rival

iii) Actuators : Screeng

iv) Sensons : Camera, Keyboard.

Answer to the Q. NO. 3(b)

Deep blue is a goal based learning agent that has the properties of :

i) Fully observable cause it can abef observe full state via sensors.

ii) Deterministic; cause it can select it's next stage

iii) sequential, cause it uses sequential approach to solve.

iv) single agent cause it is the only working agent

v) Dynamic cause the environment of the board is continously changing.

vi) Discrete cause there are finite number
   of chess moves.

vii)