QUESTION # 1

Which objections still carry weight?

* The theological objection
Machines cannot be as intelligent as human minds because only God can create mind.

The argument of consciousness
Machines lack consciousness and feelings that are necessary for true intelligence.

* The Argument from Gödel's Incompletness Theorem:
Mathematical limitation prevent any formal system from achieving complete intelligence.

* The test might not capture all aspects of intelligence.
Since test included only textual communication, other forms of intelligence can be neglected.

Machines might succeed in the test by mimicking responses rather than true understanding.

Although significant advancements in the field of AI have been achieved, any machine is still yet to pass the test.

QUESTION #2

1) ~~Yes, Forpheus is an example. However,~~ It is still a challege to play the game at a competitive level and with requirement to extremely precise decision making. Also, the physical interaction with the environment makes it difficult in ~~[illegible]~~ implementation in the context of hardware.

2) No, currently commercially available self driving cars are not equipped to handle the environment of centre of Karachi. Since lack of proper roads, people not following traffic laws, its not possible for the car to drive safely.

3) Proving mathematical theorems is something that's possible AI systems, since it relies on the available information. However, discovering anythi is not yet possible for any AI system since it requires creativity, which To date, machines lack.

Date

5) An AI system might be able to combine some predefined, related jokes to form humorous text. But it cannot replicate human understanding of emotions, cultural contexts, etc.

6) AI systems can be pretty good at suggesting certain legal procedures in response to various commonly occuring scenarios. But it cannot be relied upon as an authority about law consultancy.

7) AI systems ~~might~~ are able to translate spoken english to various other ~~languages but since urdu is not a popular & widely spoken language, great efforts have not been made~~ languages and google translate can do a pretty reasonably good job at this.

QUESTION #4

1) Playing Soccer:

Performance Measure: Winning the game, Successful Passes, No. of goals, No. of defends

Environment: soccerfield, opponent players, team players

Actuators: Mechanical parts to run, kick, jump, etc.

Sensors: camera, auditary and tachile sensors

2) Performance Measure: mapping seafloor, volcanos,
Environment: Arabia Sea, Wind
Actuators: ~~camera, lights~~ ROV
Sensors: Camera, lights, sonar sensor, samples

3) PM: winning, serves, returns
Environment: Tennis court, Opponent Player
Actuators: limbs like parts
~~PM: clearing the bar, height jumped, landing safety~~
Sensors: camera, auditory, tactile sensors

4) PM: clearing the bar, height, safe landing
E: jump track and jump pit
Actuators: parts to run, jump
Sensors: camera, tactile sensors

5) PM: Winning the item, avoid over bidding
E: Auction house, other bidders
A: submitting a bid, ~~audio microphone to hear the bids~~
S: vision camera, microphone.

QUESTION #5

1) True, because one can't be rational without knowing completely.
2) True, since reflex agents just response to conditions, they cant be rational.
3) No, there is not a task environment where every agent is rational.
4) No, the input to an agent ~~aa~~ program involves the percept and some structure to hold the percept sequence. While agent function is just a mathematic description
5) No, not every agent implementation is possible because we are still limited by our hardware and ~~technologic~~ technological limitations.