## INTELLIGENT AGENTS

Question 1

For each of the following agents, develop a PEAS description of the task environment:

a. Robot soccer player;

b. Internet book-shopping agent;

c. Mathematician's theorem-proving assistant.

Question 2

For each of the agent types listed above, characterize the environment according to standardized properties of an agent, and select a suitable agent design

Question 3

a. Can there be more than one agent program that implements a given agent function? Give an example, or show why one is not possible.

b. Are there agent functions that cannot be implemented by any agent program?

c. Given a fixed machine architecture, does each agent program implement exactly one agent function?

d. Given an architecture with n bits of storage, how many different possible agent programs are there?