PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc DEGREE EXAMINATION MAY 2019
(Second Semester)

Branch ~ COMPUTER SCIENCE

SOFTWARE AGENTS

Time: Three Hours   Maximum: 75 Marks

SECTION-A (10 Marks)
Answer ALL questions
ALL questions carry **EQUAL** marks   (10 x 1 = 10)

1. Which instruments are used for perceiving and acting upon the environment?
   (i) Sensors and Actuators   (ii) Sensors
   (iii) Perceiver   (iv) None of the mentioned

2. An agent is composed of_____ .
   (i) Architecture   (ii) Agent Function
   (iii) Perception Sequence   (iv) Architecture and Program

3. Which functions continuously and autonomously in a particular environment?
   (i) Software entity   (ii) Agent
   (iii) Resource Manager   (iv) Program

4. Which element in agent are used for selecting external actions?
   (i) Perceive   (ii) Performance
   (iii) Learning   (iv) Actuator

5. In which agent does the problem generator is present?
   (i) Learning agent   (ii) Observing agent
   (iii) Reflex agent   (iv) None of the mentioned

6. Which action sequences are used to achieve the agent's goal?
   (i) Search   (ii) Plan
   (iii) Retrieve   (iv) Both Search & Plan

7. What is Artificial Intelligence?
   (i) Putting your intelligence into Computer
   (ii) Programming with your own intelligence
   (iii) Making a machine intelligent
   (iv) Playing a game

8. How many things are concerned in design of a learning element?
   (i) 1   (ii) 2
   (iii) 3   (iv) 4

9. An expert system differs from a database program in that only an expert system:
   (i) contains declarative knowledge
   (ii) contains procedural knowledge
   (iii) features the retrieval of stored information
   (iv) expects users to draw their own conclusions

10. The primary interactive method of communication used by humans is
    (i) reading   (ii) writing
    (iii) speaking   (iv) all the above mentioned

SECTION - B (25 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 x 5 = 25)

11 a Explain Agent as a Description.
OR
    b State the limitations of direct manipulation interface.

12 a Discuss on agents for information sharing and coordination.
OR
    b Justify how the agent reduce work and information overload.

13 a Explain on Intelligent Agent.
OR
    b Classify the environment properties.

14 a What is Learning agent? Explain its basic component.
OR
    b State the Generalization rule.

15 a Explain the knowledge elicitation process.
OR
    b Determine the analysis of learning interactions.

SECTION -C (40 Marks!
Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 x 8 = 40)

16 a Enumerate barriers to intelligent interoperability.
OR
    b Determine the toward agents enabled system architecture with diagram.

17 a Evaluate the agent oriented programming.
OR
    b Illustrate on KQML as an communication Language.

18 a Classify the approaches to knowledge base development.
OR
    b Elucidate hybrid architecture.

19 a Determine the characterization of instances and objects in semantic network.
OR
    b Explain the phases of Rule Learning.

20 a Illustrate on various methodologies for building agent.
OR
    b Enumerate the general architecture of disciple shell.

z-z-z   **END**