SJ-134

September-2020

B.C.A., Sem.-VI

CC-309 : Introduction to AI and ML
(New Course)

Time : 2 Hours]   **[Max. Marks : 50**

Instructions : (1) All Questions in **Section I** carry equal marks.
                  (2) Attempt any **TWO** questions in **Section I**.
                  (3) Question 5 in **Section II** is **COMPULSORY**.

Section – I

1.	(A)	Explain applications of AI in detail.	10
	(B)	Explain properties task environments.	10
2.	(A)	Explain A* Search with example.	10
	(B)	Explain breadth-first search and depth first search with example.	10
3.	(A)	What is an information retrieval ? Explain PageRank and HITS algorithms.	10
	(B)	Define information extraction. Explain finite-state automata(FSA) for information extraction.	10
4.	(A)	Explain semi-supervised learning and reinforcement learning in detail.	10
	(B)	Define machine learning. Give differences between supervised and unsupervised learning.	10

Section – II

5. Do as directed. (Any **Five**)   10

    1. Acting rationally is the _____ approach.
       (a) Rational Agent
       (b) Turing test
       (c) Laws of thought
       (d) None of above

    2. An agent can be viewed as perceiving its environment through_____.
       (a) Sensors
       (b) Sensors and Actuators
       (c) Perceiver
       (d) None of above

3. In Search algorithms, the structure of a node contains ____ components.
   (a) State and Parent
   (b) Action
   (c) Path-cost
   (d) All of above

4. ____ search strategy is also called as blind search.
   (a) Simple reflex search
   (b) Uninformed search
   (c) Informed search
   (d) None of these

5. _____ is/are example/s of toy problems.
   (a) Vacuum worlds
   (b) 8-queens problem
   (c) 8-puzzle
   (d) All of above

6. The NLP system takes ____ as an input.
   (a) Speech
   (b) Written text
   (c) Both (a) and (b)
   (d) None of above

7. The Support Vector Machine(SVM) is a/an____ algorithm.
   (a) Supervised learning
   (b) Reinforcement learning
   (c) Unsupervised learning
   (d) None of these

8. The ____ is/are type/s of reinforcement learning.
   (a) Direct learning
   (b) Indirect learning
   (c) Both (a) and (b)
   (d) None of above

9. _____ is used to improve agent's performance.
   (a) Learning
   (b) Omniscience
   (c) Autonomy
   (d) None of above

10. The N-gram models include/s____.
   (a) unigram
   (b) trigram
   (c) bigram
   (d) All of above

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B.C.A., Sem.-VI

CC-309 : E-Commerce
(Old Course)

Time : 2 Hours]   **[Max. Marks : 50**

Instructions : (1)   All Questions in **Section I** carry equal marks.
(2)   Attempt any **TWO** questions in **Section I**.
(3)   Question 5 in **Section II** is **COMPULSORY**.

Section – I

1. (A)   List and explain eight unique features of e-commerce.   **10**
    (B)   Explain email protocols and utility programs.   **10**

2. (A)   List and explain dimensions of e-commerce security.   **10**
    (B)   What is encryption? Explain symmetric key encryption in detail.   **10**

3. (A)   List e-commerce payment system. Explain any two in detail.   **10**
    (B)   What is online auction? Explain any three types in detail.   **10**

4. (A)   Explain candidate ethical principles.   **10**
    (B)   List intellectual property rights. Explain any one in detail.   **10**

Section – II

5. Answer the following. (Any **five**)   **10**
    1.   Amazon is _____ type of e-commerce.
         (a)   B2B
         (b)   B2C
         (c)   C2C
         (d)   All of these
    2.   SSL stands for _____
         (a)   System Secure Layer
         (b)   Secure Socket Layer
         (c)   Secure System Layer
         (d)   None of above

3. _____ is a network located within a single organization.
   (a) Internet
   (b) Extranet
   (c) Intranet
   (d) None of these

4. Spoofing is also known as _____.
   (a) Pharming
   (b) Sniffing
   (c) Phishing
   (d) Bots

5. _____ is a type of malicious code.
   (a) Virus
   (b) Worm
   (c) Trojan Horse
   (d) All of above

6. In a _____ pricing rule, multiple winners pay different amount depending on what they bid.
   (a) Uniform
   (b) Discriminatory
   (c) Public
   (d) None of these

7. SET stands for
   (a) Secure Electronic Transaction
   (b) Safe Electronic Transaction
   (c) Secure Encryption Standard
   (d) None of these

8. Patent is granted for _____ years.
   (a) 10
   (b) 20
   (c) 50
   (d) 70

9. _____ is a mark used to identify and distinguish goods and indicate their source.
   (a) Patent
   (b) Copyright
   (c) Trademark
   (d) None of these

10. The study of principles that individuals and organizations can use to determine right and wrong course of action is called _____.
    (a) Ethics
    (b) Accountability
    (c) Responsibility
    (d) Liability

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