





BRAINWARE UNIVERSITY

Term End Examination 2022 Programme – B.Sc.(ANCS)-Hons-2020 **Course Name – Introduction to Modern Technologies** Course Code - BNCSD501C (Semester V)

Full Marks: 60 Time: 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

- Choose the correct alternative from the following:
- (i) Trace the learning algorithms where ML is a field of AI consist
 - a) Improve their performance
 - c) Over time with experience
- (ii) Relate Weak AI is
 - a) a set of computer programs that produce output that would be considered to reflect intelligence if it were generated by humans
 - c) the embodiment of human intellectual capabilities within a computer
- (iii) Review Strong Artificial Intelligence is
 - a) the embodiment of human intellectual capabilities within a computer
 - c) the study of mental faculties through the use of mental models implemented on a computer
- (iv) Explain what is tokenization
 - a) Creating a set of vocabularies
 - c) Removing stop-words

b) Breaking sentences into words

b) Decision trees are robust to outliers

d) All of the Mentioned

All of the Mentioned

b) At executing some task

All of the Mentioned

b) the study of mental faculties through the

use of mental models implemented on a

b) a set of computer programs that produce

output that would be considered to reflect

intelligence if it were generated by humans

d) All of the mentioned

computer

d)

- (v) Determine which of the following is a disadvantage of decision trees
 - a) Factor Analysis

- d) None of the Mentioned
- c) Decision trees are prone to be overfit
- (vi) Choose the correct order for preprocessing in Natural Language Processing
- a) Tokenization -> Stemming -> Lemmatization
 - b) Lemmatization -> Tokenization -> Stemming d) None of the Mentioned
 - c) Stemming -> Tokenization -> Lemmatization
- (vii) Test, the term used for a blockchain splits
- - a) A Merger
 - c) A Division

- b) A Fork
- d) None of the Mentioned

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2. Cite the main Features of the Hill Climbing Algorithm 3. Illustrate why is Natural Language Processing Important 4. Explain why to use Unsupervised Learning 5. Express something about Blockchain Hashing OR Create a note on Augmented Reality Relies On Artificial Intelligence 6. Explain what is Blockchain OR Explain three different types of probable attacks in the Bitcoin system Group-C (3) Group-C	0	(viii) Connect the keyword, UTXO stands for		
c) Star Topology (x) Justify which of the following protocols does not exist at the data link layer a) ZigBee Smart Energy c) WirelessHART d) Secure MQTT (x) Write Augmented reality refers to a) Our increased ability to better understand our situations thanks to easy internet search c) Digital overlays of information onto a screen that is showing the real world to digital technologies (xii) Propose, which of the following algorithm is used in AR a) Markov c) PCA d) Apriori (xiii) Recognize, which search method takes less memory a) Depth-First Search c) Linear Search d) Optimal search (xiv) Match the correct word to fits in the statement, is a state that is better than all its neighboring states but is not better than some other states further away a) Plateau c) Global Maximum d) Local Maximum d) Local Maximum d) Hore the expansion if PEAS in task environment a) Peer, Environment, Actuators, Sense c) Performance; Environment, Actuators, Sense c) Performance; Environment, Actuators, Sense c) Performance; Environment, Actuators, Sensors Group-B (Short Answer Type Questions) 3 x 5=12 2. Cite the main Features of the Hill Climbing Algorithm 3. Illustrate why is Natural Language Processing Important 4. Explain why to use Unsupervised Learning 5. Express something about Blockchain OR Create a note on Augmented Reality Relies On Artificial Intelligence (Long Answer Type Questions) 5 x 6=30 Group-C (Long Answer Type Questions) 5 x 6=30 7. Visualize the Tic-Tac-Toe game tree with an example and diagram (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life cycle of Machine learning (S) D) Discuss the Life c		c) United Transaction Output (ix) Predict which of the following topology is u	d) Unspent Transaction Output	
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Illustrate how Merkle trees work

Library
Brainware University
398, Ramkrishnapur Road, Barase
Kolkata, West Bengal-700125
