

### AI&SC Question Bank - MCA Sem IV

Sr. No.	Question	Option a	Option b	Option c	Option d
1	External actions of the agent is selected by	a) Perceive	b) Performance	c) Learning	d) Actuator
2	Which instruments are used for perceiving and acting upon the environment?	a) Sensors and Actuators	b) Utility	c) Perceiver	d) Agent
3	_____ is the set of all states reachable from the initial state	a) state space	b) problem design	c) goal state	d) problem Definition
4	Knowledge gathered from some concepts, procedures or principle	a) Experience	b) Tacit	c) Implicit Knowledge	d) Explicit Knowledge
5	Which is not a property of representation of knowledge base system?	a) Acquisitional Efficiency	b) Inferential Adequacy	c) Inferential Efficiency	d) Representational Verification
6	_____ is made up of objects consisting of attributes and their corresponding associated values	a) Relational knowledge	b) Inheritable Knowledge	c) Inferential Knowledge	d) Declarative knowledge
7	_____ generates new information from the given information	a) Inferential Knowledge	b) Relational knowledge	c) Inheritable Knowledge	d) Declarative knowledge
8	Who initiated the idea of Soft Computing?	a) Charles Darwin	b) Lofti A Zadeh	c) Mc_Culloch	d) Rechenberg
9	_____ requires a precisely stated analytical model	a) Hard computing	b) Soft Computing	c) ANN	d) Fuzzy System
10	The fundamental unit of Neural network is _____	a) Brain	b) Neuron	c) Input	d) Weights
11	The process of adjusting the weight is known as?	a) activation	b) synchronisation	c) learning	d) output
12	The internal state of Neuron is called _____	a) Activation	b) Weight	c) Node	d) Bias
13	Multilayer perceptron is _____	a) supervised learning	b) Unsupervised learning	c) reinforcement Learning	d) Feedback Learning
14	Perceptron is _____	a) an auto-associative neural network	b) a double layer auto-associative neural network	c) a single layer feed-forward neural network with pre-processing	d) a neural network that contains feedback
15	Back propagation network is _____	a) an auto-associative neural network	b) a double layer auto-associative neural network	c) the transmission of error back through the network to adjust the inputs	d) the transmission of error back through the network to allow weights to be adjusted so that the network can
16	Learning based on critic information is called _____	a) supervised learning	b) Unsupervised learning	c) reinforcement Learning	d) Feedback Learning
17	5. Fuzzy logic is a form of _____	a) Two-valued logic	b) Crisp set logic	c) Binary set logic	d) Many-valued logic
18	Three main basic features involved in characterizing membership function are	a) Fuzzy Algorithm, Neural network, Genetic Algorithm	b) Intution, Inference, Rank Ordering	c) Core, Support , Boundary	d) Weighted Average, center of Sums, Median

19	A fuzzy set whose membership function has at least one element $x$ in the universe whose membership value is unity is called _____	a) sub normal fuzzy sets	b) normal fuzzy set	c) convex fuzzy set	d) concave fuzzy set
20	Which of the following centroid method considers overlapping region twice?	a) Center of Area	b) Center of Gravity	c) Center of sum	d) Mean of Maxima
21	_____ is the process of obtaining the overall consequents from the individual consequents provided by each rule.	a) Decomposition of rules	b) Aggregation of rules	c) Fuzzy qualifier	d) Fuzzy quantifier
22	Which of the following component of FIS converts the fuzzy quantities into crisp quantities?	a) Fuzzification	b) Defuzzification	c) Decision making unit	d) Rule Base
23	Which statement is true for "Binary encoding" techniques?	a) Representing a gene in terms of values or symbols or string	b) Representing a sequence of elements	c) Representing a gene in terms of bits	d) Representing in the form of a tree of objects
24	The purpose of the fitness evaluation operation is _____	a) To select the best individuals.	b) To check whether all individual satisfies the constraints given	c) To decide the termination point.	d) To identify the individual with worst cost function.
25	The truth values of traditional set theory is _____ and that of fuzzy set is _____	a) Either 0 or 1, between 0 & 1	b) Between 0 & 1, either 0 or 1	c) Between 0 & 1, between 0 & 1	d) Either 0 or 1, either 0 or 1