

Program: BE Computer Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: CSDLO6021 and Course Name: Department Level Optional Course -II:-Machine Learning

Time: 1 hour

Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	In ----- the computer is provided with example inputs that are labeled with their desired outputs
Option A:	Supervised Learning
Option B:	Reinforcement Learning
Option C:	Unsupervised Learning
Option D:	Semi supervised Learning
Q2.	According to which researcher definition of Machine Learning is "A computer program is said to learn from experience (E) with respect to some class of tasks (T) and performance measure (P), if its performance at tasks in T, as measured by P, improves with experience E."
Option A:	McKinsey
Option B:	Pedro Domingos
Option C:	Carnegie Mellon
Option D:	Tom Mitchell
Q3.	Predicting credit approval based on historical data is example of ?
Option A:	Supervised Learning
Option B:	Reinforcement Learning
Option C:	Unsupervised Learning
Option D:	Semi supervised Learning
Q4.	Predicting if a cricket player is a batsman or bowler given his playing records.
Option A:	Regression
Option B:	Linear regression
Option C:	Classification
Option D:	clustering
Q5.	In feedback ANN network , if the feedback of the output layer is connected back to the same layer, It is called ----- feedback
Option A:	feed forward

Option B:	recurrent
Option C:	lateral
Option D:	proximal
Q6.	Learning in Neuron takes place by changing effectiveness of ----- - so that the influence of one neuron on another
Option A:	Dendrite
Option B:	Axon
Option C:	Nucleous
Option D:	Synapses
Q7.	In ANN----- number of hidden layers makes the network more complex
Option A:	less
Option B:	more
Option C:	limited
Option D:	small
Q8.	Artificial neural systems function as ----- computing networks
Option A:	Sequential distributed
Option B:	Overlapped distributed
Option C:	Parallel distributed
Option D:	hybrid
Q9.	Which implementation of function require hidden layer in McCulloch-pits neuron model?
Option A:	AND
Option B:	AND NOT
Option C:	OR
Option D:	XOR
Q10.	In steepest Descent, Minimization occurs in the ----- direction of the gradient vector
Option A:	Positive
Option B:	Negative
Option C:	forward
Option D:	recurrent
Q11.	For what value of x is the function $x^2-4x-6$ minimized ?
Option A:	0
Option B:	1
Option C:	2
Option D:	3
Q12.	Which Optimization method is derivative based method?
Option A:	Newton's Method
Option B:	Downhill Simplex
Option C:	Genetic algorithm

Option D:	Simulated Annealing
Q13.	Which optimization method is derivative free ?
Option A:	Newton's Method
Option B:	Downhill Simplex
Option C:	Steepest ascent
Option D:	Steepest descent
Q14.	Select the method which require calculation of Twice differentiable of optimization function
Option A:	Newton's Method
Option B:	Downhill Simplex
Option C:	Steepest ascent
Option D:	Random search
Q15.	Which of the following plot is best suited to test linear relationship of y(dependent) and x(independent) continuous variables?
Option A:	Scatter Plot
Option B:	Barchart
Option C:	Histograms
Option D:	Pie chart
Q16.	How Many coefficients do you need to estimate a simple Linear Regression
Option A:	1
Option B:	2
Option C:	3
Option D:	4
Q17.	A correlation between age and health of a person found to be -1.09. On the basis of this what is the conclusion
Option A:	Age is good predictor of health and its positively correlated
Option B:	Age is poor predictor of health and is negatively correlated
Option C:	Age is good predictor and is negatively correlated
Option D:	Age is Poor predictor of health and it is positively correlated
Q18.	Logistic Regression comes under the category of what algorithm
Option A:	Supervised regression
Option B:	Supervised classification
Option C:	Unsupervised Learning
Option D:	Reinforcement Learning
Q19.	Suppose you applied a logistic regression model on a given data and got a training accuracy X and testing accuracy Y. Now , You want to add a few features in the same data. Select the options which is the correct in such case
Option A:	Training accuracy decreases
Option B:	Training accuracy increases or remains the same
Option C:	Testing accuracy decreases

Option D:	Testing accuracy increases or remains the same
Q20.	In Confusion Matrix, $TP/(TP + FP)$ is known as.....
Option A:	Negative predictive rate
Option B:	Sensitivity
Option C:	Specificity
Option D:	Precision
Q21.	In EM algorithm E-step is .....
Option A:	Enhancement
Option B:	Enrichment
Option C:	Expectation
Option D:	Experiment
Q22.	The basis of Radial Basis function is based on -----.
Option A:	McCulloch model
Option B:	ANN model
Option C:	SVM
Option D:	Cover's Theorem
Q23.	If Radial Basis function Network (RBFN) is having exactly one hidden layer, then this hidden layer is known as-----
Option A:	Input vector
Option B:	Output vector
Option C:	Feature vector
Option D:	Hidden vector
Q24.	Probabilities in Baye's theorem that are changed with the help of new available information are classified as
Option A:	Independent probabilities
Option B:	Posterior probabilities
Option C:	Interior probabilities
Option D:	Dependent probabilities
Q25.	In Principal Component Analysis (PCA) dimensionality reduction technique , What are PCA components?
Option A:	Set of all eigen vectors for the projection space
Option B:	Standard deviation
Option C:	Result of the multiplication matrix
Option D:	Covariance matrix