Latest Version: 6.0

A new test to diagnose a disease is evaluated on 1152 people, and 106 people have the disease, and 1046 people do not have the disease. The test results are summarized below:

	Test predicts disease	Test predicts no disease
Have the disease	73	33
Do not have the disease	81	965

In this sample, how many cases are false positives and false negatives?

A. 33 false positives and 81 false negatives
B. 81 false positives and 73 false negatives
C. 73 false positives and 81 false negatives
D. 81 false positives and 33 false negatives

Answer: A

What is the goal of the backpropagation algorithm?

A. to randomize the trajectory of the neural network parameters during training
B. to smooth the gradient of the loss function in order to avoid getting trapped in small local minimas
C. to scale the gradient descent step in proportion to the gradient magnitude
D. to compute the gradient of the loss function with respect to the neural network parameters

Answer: B

Reference: https://www.sciencedirect.com/topics/computer-science/backpropagation

With the help of AI algorithms, which type of analytics can help organizations make decisions based on facts and probability-weighted projections?

A. prescriptive analytics
B. cognitive analytics

C. predictive analytics
D. descriptive analytics

<div style="border:2px solid black; display:inline-block;">

Answer: A

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Reference: https://www.investopedia.com/terms/p/prescriptive-analytics.asp

Question: 4

What is the technique called for vectorizing text data which matches the words in different sentences to determine if the sentences are similar?

A. Cup of Vectors
B. Box of Lexicon
C. Sack of Sentences
D. Bag of Words

<div style="border:2px solid black; display:inline-block;">

Answer: D

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Reference: https://medium.com/@adriensieg/text-similarities-da019229c894

Question: 5

Which statement is true in the context of evaluating metrics for machine learning algorithms?

A. A random classifier has AUC (the area under ROC curve) of 0.5
B. Using only one evaluation metric is sufficient
C. The F-score is always equal to precision
D. Recall of 1 (100%) is always a good result

<div style="border:2px solid black; display:inline-block;">

Answer: B

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