**BUS 204 S23 Quiz 4 (Optional) M 5/7/23**

00:30:00

Last Name  


First Name  


Email address  


Last Four digits of your University's ID:  


When you click the next button the quiz will begin. Do your best to answer each question correctly. You have 30 minutes to complete this quiz. Good Luck!

**Question 1 of 25**

One-way Analysis of Variance:

* is an analysis of variance design in which independent samples are obtained from two or more levels of single factors
* has the purpose of testing whether the levels have equal means
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 2 of 25**

ANOVA assumptions include:

* the population follow the normal distribution
* the population have equal standard deviations
* the populations are independent
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 3 of 25**

The F-distribution is:

* used to test whether two samples are from populations having equal variances
* used when an analyst wants to compare several populations means simultaneously
* samples can be randomly selected
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 4 of 25**

Chi-square distribution is:

* based on the random sample from a normally distributed population
* applied to test the standardized sample variances
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 5 of 25**

Decision theory is:

* an analytic and systematic way to tackle problems
* seeks good decisions based on logic
* does not depend on intuition
* process and fact-based
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 6 of 25**

Seven steps of decision-making include:

* clearly define the problem at hand
* list the possible alternatives
* identify the possible outcomes or states or nature
* list the payoff or profit of each combination of alternatives and outcomes
* select one of the mathematical decision theory models
* apply the model
* make a decision
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 7 of 25**

Decision making under certainty is:

* a decision-making environment in which the future outcomes or states of nature are known
* applied in GAP analysis
* assumes that the future will look like the past
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 8 of 25**

Decision-making under risk is:

* a decision-making environment in which several outcomes may occur as a result of decision or alternative
* the probabilities of these outcomes are known
* assumes that the future will look like the past
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 9 of 25**

Decision-making under uncertainty is:

* a decision-making environment in which several outcomes occur
* the probabilities of the outcomes are not known
* most people are uncomfortable with this environment
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 10 of 25**

Criterion of Realism:

* used the weighted average
* utilizes (alpha), which is a symbol for the coefficient of realism
* is expressed as a number from 0 to 1
* when it is closer to 1, the decision criterion is optimistic
* when it is closer to 0, the decision criterion is pessimistic
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 11 of 25**

LaPlace is:

* applied when the future states of nature do not matter
* a decision criterion that places equal weights on all states of nature
* used as a decision-making tool under conditions of certainty
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 12 of 25**

Minimax regret is:

* based on the opportunity loss
* the cost of not picking the best solution
* used when solving problems with uncertainty
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 13 of 25**

Decision tree:

* is a graphical representation of information
* it contains the same information as a decision table
* is built from the left and then solved from the right
* all of these
* none of these

***(10 points) | \_\_\_***

**Question 14 of 25**

Expected Monetary Value:

* All of these.
* None of these.
* is the weighted sum of possible payoffs for each alternative
* is the weighted sum of possible payoffs for some alternatives
* is the possible payoff for one alternative

***(10 points) | \_\_\_***

**Question 15 of 25**

Expected Value of Perfect Information:

* All of these.
* None of these.
* places an upper bound on what to pay for information
* is the expected value with perfect information minus the maximum EMV
* is applicable to analysis under conditions of uncertainty

***(10 points) | \_\_\_***

**Question 16 of 25**

Which are the steps in the Decision Tree Analysis:

* All of these.
* None of these.
* define the problem
* structure or draw the decision tree
* assign probabilities to the states of nature
* estimate payoffs for each possible combination of alternatives and states of nature
* solve the problem by computing the expected monetary value for each state of nature

***(10 points) | \_\_\_***

**Question 17 of 25**

Conditional Value of Payoff is a consequence that occurs as a result of a particular alternative and state of nature:

* True
* False

***(10 points) | \_\_\_***

**Question 18 of 25**

In a decision tree, a decision node is a point where the best (the highest EMV) from the available alternatives is chosen:

* True
* False

***(10 points) | \_\_\_***

**Question 19 of 25**

The shape of a person's utility curve depends on many factors:

* True
* False

***(10 points) | \_\_\_***

**Question 20 of 25**

Alternative is a course of action or a strategy that must be chosen by a decision-maker:

* True
* False

***(10 points) | \_\_\_***

**Question 21 of 25**

Risk-seeker is a person for whom taking a greater risk with a higher potential return has higher utility:

* True
* False

***(10 points) | \_\_\_***

**Question 22 of 25**

Risk-avoider is a person who gets less utility from a greater risk and higher potential return:

* True
* False

***(10 points) | \_\_\_***

**Question 23 of 25**

Utility theory is a theory that allows the decision-maker to incorporate their risk preference and other factors into the decision-making process:

* True
* False

***(10 points) | \_\_\_***

**Question 24 of 25**

Sensitivity analysis investigates how your decision might change with different input data:

* True
* False

***(10 points) | \_\_\_***

**Question 25 of 25**

Criteria for making decisions under uncertainty include:

* Maximax
* Maximin
* Hurwicz criterion
* LaPlace method
* Minimax regret
* All of these
* None of these

***(10 points) | \_\_\_***

You have reached the end of the quiz. Please click next to submit your work for grading.