**BUS 322 S24 Quiz 4 (Optional)**

**Answer Key**

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**

1. 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 (0 points)
* has the purpose of testing whether the levels have equal means (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 2 of 25**

2. ANOVA assumptions include:

* the population follow the normal distribution (0 points)
* the population have equal standard deviations (0 points)
* the populations are independent (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 3 of 25**

3. The F-distribution is:

* used to test whether two samples are from populations having equal variances (0 points)
* used when an analyst wants to compare several populations means simultaneously (0 points)
* samples can be randomly selected (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 4 of 25**

4. Chi-square distribution is:

* based on the random sample from a normally distributed population (0 points)
* applied to test the standardized sample variances (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 5 of 25**

5. Decision theory is:

* an analytic and systematic way to tackle problems (0 points)
* seeks good decisions based on logic (0 points)
* does not depend on intuition (0 points)
* process and fact-based (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 6 of 25**

6. Seven steps of decision-making include:

* clearly define the problem at hand (0 points)
* list the possible alternatives (0 points)
* identify the possible outcomes or states or nature (0 points)
* list the payoff or profit of each combination of alternatives and outcomes (0 points)
* select one of the mathematical decision theory models (0 points)
* apply the model (0 points)
* make a decision (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 7 of 25**

7. Decision making under certainty is:

* a decision-making environment in which the future outcomes or states of nature are known (0 points)
* applied in GAP analysis (0 points)
* assumes that the future will look like the past (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 8 of 25**

8. Decision-making under risk is:

* a decision-making environment in which several outcomes may occur as a result of decision or alternative (0 points)
* the probabilities of these outcomes are known (0 points)
* assumes that the future will look like the past (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 9 of 25**

9. Decision-making under uncertainty is:

* a decision-making environment in which several outcomes occur (0 points)
* the probabilities of the outcomes are not known (0 points)
* most people are uncomfortable with this environment (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 10 of 25**

10. Criterion of Realism:

* used the weighted average (0 points)
* utilizes (alpha), which is a symbol for the coefficient of realism (0 points)
* is expressed as a number from 0 to 1 (0 points)
* when it is closer to 1, the decision criterion is optimistic (0 points)
* when it is closer to 0, the decision criterion is pessimistic (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 11 of 25**

11. LaPlace is:

* applied when the future states of nature do not matter (0 points)
* a decision criterion that places equal weights on all states of nature (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 12 of 25**

12. Minimax regret is:

* based on the opportunity loss (0 points)
* the cost of not picking the best solution (0 points)
* used when solving problems with uncertainty (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 13 of 25**

13. Decision tree:

* is a graphical representation of information (0 points)
* it contains the same information as a decision table (0 points)
* is built from the left and then solved from the right (0 points)
* all of these (10 points)
* none of these (0 points)

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

Correct

Incorrect

**Question 14 of 25**

14. Expected Monetary Value:

* All of these. (0 points)
* None of these. (0 points)
* is the weighted sum of possible payoffs for each alternative (10 points)
* is the weighted sum of possible payoffs for some alternatives (0 points)
* is the possible payoff for one alternative (0 points)

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

Correct

Incorrect

**Question 15 of 25**

15. Expected Value of Perfect Information:

* All of these. (10 points)
* None of these. (0 points)
* places an upper bound on what to pay for information (0 points)
* is the expected value with perfect information minus the maximum EMV (0 points)
* is applicable to analysis under conditions of uncertainty (0 points)

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

Correct

Incorrect

**Question 16 of 25**

16. Which are the steps in the Decision Tree Analysis:

* All of these. (10 points)
* None of these. (0 points)
* define the problem (0 points)
* structure or draw the decision tree (0 points)
* assign probabilities to the states of nature (0 points)
* estimate payoffs for each possible combination of alternatives and states of nature (0 points)
* solve the problem by computing the expected monetary value for each state of nature (0 points)

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

Correct

Incorrect

**Question 17 of 25**

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

* True (10 points)
* False (0 points)

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

Correct

Incorrect

**Question 18 of 25**

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

* True (10 points)
* False (0 points)

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

Correct

Incorrect

**Question 19 of 25**

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

* True (10 points)
* False (0 points)

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

Correct

Incorrect

**Question 20 of 25**

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

* True (10 points)
* False (0 points)

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

Correct

Incorrect

**Question 21 of 25**

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

* True (10 points)
* False (0 points)

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

Correct

Incorrect

**Question 22 of 25**

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

* True (10 points)
* False (0 points)

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

Correct

Incorrect

**Question 23 of 25**

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

* True (10 points)
* False (0 points)

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

Correct

Incorrect

**Question 24 of 25**

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

* True (10 points)
* False (0 points)

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

Correct

Incorrect

**Question 25 of 25**

25. The prisoner' dilemma describes a situation where, according to game theory, two players acting selfishly will ultimately result in a suboptimal choice for both.

* True (10 points)
* False (0 points)

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

Correct

Incorrect

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