

ADA PRE-COURSE QUIZ

Multiple Choice. Select the letter that best answers the question.

- 1) For a *positively-skewed* distribution, what is the proper sequence?
 - a) mean < median < mode
 - b) mode < P50 < median
 - c) mode < median < mean
 - d) mean < mode < median
- 2) The Microsoft Excel program uses what discounting assumption in its NPV function?:
 - a) Continuous cashflows
 - b) Cashflows at period starts
 - c) Cashflows at period ends
 - d) Cashflows at midperiods
- 3) In constructing decision trees, it is permissible to place costs along branches and use these in back-solving the tree. This works because:
 - a) The delta property of expected value
 - b) The distributive property of means
 - c) All costs are included in the terminal node values
 - d) The stochastic dominance principle.
- 4) The *risk tolerance coefficient* used in an exponential utility function for risk policy represents:
 - a) A scaling factor for risk aversion
 - b) The maximum amount the company would risk on any one project
 - c) The company's net worth
 - d) The maximum amount the company is willing to pay to avoid risk.
- 5) Latin hypercube sampling is used for:
 - a) Collecting data samples, as in field studies
 - b) Reducing the time to convergence in Monte Carlo simulation
 - c) Method of correlating dependent chance events
 - d) Method of correlating independent chance events
- 6) The chronology of nodes in a decision tree should follow:
 - a) Decision nodes first, then chance events
 - b) The historical sequence of nature
 - c) The sequence of the project
 - d) Independent chance events first.
- 7) $P(AB) \geq 0$ means
 - a) A and B are independent
 - b) A and B are not mutually exclusive
 - c) A and B are dependent
 - d) None of the above.
- 8) Which representation shows the importance of input variables contributing to outcome uncertainty?
 - a) Tornado chart
 - b) Influence diagram
 - c) Scatter diagram of input variables
 - d) Joint probability table.
- 9) Which is used to revise probabilities based upon imperfect information?
 - a) Influence diagram
 - b) Addition theorem
 - c) Stochastic inversion
 - d) Bayes' rule.
- 10) Which is the most popular measure of uncertainty?
 - a) Correlation coefficient
 - b) Variance
 - c) Standard deviation
 - d) Median.

For the first 10 questions, please circle your answers and hand-in this sheet.

Or you may e-mail answers to john@maxvalue.com, subject "ADA Pre-Test" or similar.

Your "reward" for submitting answers is another 11 practice questions plus answers to all 21 questions.

- 1) a b c d
- 2) a b c d
- 3) a b c d
- 4) a b c d
- 5) a b c d
- 6) a b c d
- 7) a b c d
- 8) a b c d
- 9) a b c d
- 10) a b c d

Any comments?: _____
