Assignment 10

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment. Due on 2019-04-10, 23:59 IST.

1) Methods to find the most probable point (MPP) are: ______ and ______. [1 point]

- Performance measure approach and reliability index approach
- Performance measure approach and sequential index approach
- Utility measure approach and reliability index approach
- Performance index approach and reliability measure approach

No, the answer is incorrect.
Score: 0
Accepted Answers:
Performance measure approach and reliability index approach

2) Goal programming is an analytical approach to address decision making problems where targets have been assigned to all attributes and the decision maker is interested in ______ of corresponding goals. [1 point]

- Minimizing non-achievement
- Maximizing non-achievement
- Minimizing achievement
- Maximizing achievement

No, the answer is incorrect.
Score: 0
Accepted Answers:
Minimizing non-achievement

3) The purpose of goal programming is to minimize deviation between achievement of goals and their ______. [1 point]

- Aspiration levels
4) One can use goal programming to address issues of multi attribute utility theory

- TRUE
- FALSE

No, the answer is incorrect.
Score: 0

Accepted Answers:
TRUE

5) Bayesian analysis revises _______ probabilities based on new information

- Prior
- Posterior
- Conditional
- Optimal

No, the answer is incorrect.
Score: 0

Accepted Answers:
Prior

6) If the random variable X takes one of only two values (representing two brands, or a purchase and non-purchase situation) $X = x = 1$, with probability $p$, and $X = x = 0$, with probability $1 - p$ we obtain a model such that:

- $P(X=x) = p^{(1-x)}(1-p)^{(1-x)}$
- $P(X=x) = p^{x}(1-p)^{(1-x)}$
- $P(X=x) = p^{x}(1-p)^x$
- $P(X=x) = p^{1-x}(1-p)^x$

No, the answer is incorrect.
Score: 0

Accepted Answers:
$P(X=x) = p^{x}(1-p)^{(1-x)}$

7) In Zero Order Markov brand choice model probability of purchasing a particular brand at $t$ does not depend on purchasing behavior at $t-1$, $t-2$, etc:

- TRUE
- FALSE

No, the answer is incorrect.
Score: 0

Accepted Answers:
TRUE

8) Transition probabilities matrix is:

- Matrix of brand loyalty and brand switching probabilities
- Matrix of Bernoulli trials of brand choice
- Matrix of expected demand of each brand in market
- Matrix of posterior distribution of brand choice in market

No, the answer is incorrect.
9) Bayes rule can be used to learn about the demand in period 2 if the retailer charged a price \( p_1 \) in the first period and the realized demand in period 1 was \( x_1 \)

- TRUE
- FALSE 

No, the answer is incorrect.

Score: 0

Accepted Answers:
- TRUE 

10) Diffusion process and _____ are important terms in bass model

- Adoption process
- Switching process
- Substitution process
- Retention process

No, the answer is incorrect.

Score: 0

Accepted Answers:
- Adoption process 

11) In bass model \( p = _____ \) and \( q = _______ \).

- Coefficient of innovation and Coefficient of imitation
- Coefficient of imitation and Coefficient of innovation
- Coefficient of adoption and Coefficient of switching
- Coefficient of switching and Coefficient of adoption

No, the answer is incorrect.

Score: 0

Accepted Answers:
- Coefficient of innovation and Coefficient of imitation 

12) As per Bass model the time for peak demand is given as:

- \( T^* = \frac{-1}{p+q}\log \left( \frac{p}{q} \right) \)
- \( T^* = \frac{-1}{p-q}\log \left( \frac{p}{q} \right) \)
- \( T^* = \frac{-1}{p+q}\log \left( \frac{q}{p} \right) \)
- \( T^* = \frac{-1}{p-q}\log \left( \frac{q}{p} \right) \)

No, the answer is incorrect.

Score: 0

Accepted Answers:
- \( T^* = \frac{-1}{p+q}\log \left( \frac{p}{q} \right) \) 

13) One can use ordinary least squares procedure to estimate parameters of Bass model

- TRUE 
- FALSE 

No, the answer is incorrect.
14. The rate of adoption given as Bass model as can be explained in terms of:

- Hazard function
- Bernoulli function
- Poisson function
- Binary function

No, the answer is incorrect.

Score: 0

Accepted Answers:
- Hazard function

15. Generalised Bass model includes:

- Managerial decision variables such as pricing and advertising
- Utility parameters such as features, cost, brand loyalty
- Purchase incidence and quantity of purchase
- Word-of-mouth effect is dependent on time

No, the answer is incorrect.

Score: 0

Accepted Answers:
- Managerial decision variables such as pricing and advertising