Code No: 58121 **Set No. 1**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

OPERATION RESEARCH

Objective Exam

Name: _____ Hall Ticket No. | | | | | | A | | | | |

Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. Customer behavior in which he moves from one queue to another in a multiple channel situation is [ ]
   a) Balking b) reneging c) jockeying d) alternating

2. Which symbol describes the inter-arrival time distribution [ ]
   a) D b) M c) G d) All the above

3. If EOQ is calculated but an order is then placed which is smaller than this will the variable cost [ ]
   a) Increase b) decrease c)either increase or decrease d) no change

4. Which costs can vary with order quantity [ ]
   a) unit cost only b) Re order cost only c)Holding cost only d) All the above

5. The purpose of using simulation technique is to [ ]
   a) simulate a real world situation
   b) understand properties and operating characteristics of complex real life problems
   c) reduce the cost of experiment on a model of a real situation
   d) all of the above

6. Which of the following is not the special purpose simulation language [ ]
   a) BASIC b) GPSS c) GASP d) SIMSCRIPT

7. As simulation is not and alytical model, therefore result of simulation must be viewed as [ ]
   a) unrealistic b) exact c) approximation d) simplified

8. The important step required for simulation approach in solving a problem is to [ ]
   a) test and validate the model b) design the experiment
   c) conduct the experiment d) all of the above

9. The return function in a dynamic programming model depends on [ ]
   a)stages b) states c) alternatives d) all of the above

10. A translation function is expressed as [ ]
    a) $s_{n-1} = t_n(s_n, d_n)$ b)$s_n = t_n(s_{n-1}, d_{n-1})$
    c)$s_{n+1} = t_n(s_{n+2}, d_{n+2})$ d) all of the above

Cont.....2

II Fill in the Blanks:

11. The _____referred to the number of units of an item required in each period.
12. Re order level = demand during _____ lead time.
13. _____ incurred by having demand for a product when the inventory is completely deflected.
14. As the complexity of a model increases simulation seeks to _____ the uncertainty in the model.
15. Simulation is the process of a model of a real system and conducting _____
16. Using simulation for queuing problem would be appropriate if the _____ follows a poisson distribution.
17. In the _____ the arrival of customers depends on the nature of arrival rate.
18. The _____ is controlled by both service facility and the customers.
19. The _____ distribution provides probabilities for time gap between two consecutive arrivals.
20. The payment of telephone bills by a cheque or cash is the example of dynamic _____

-oOo-

Code No: 58121 **Set No. 2**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

OPERATION RESEARCH

Objective Exam

Name: _____ Hall Ticket No. | | | | | | A | | | | |

Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. Which costs can vary with order quantity [ ]
   a) unit cost only b) Re order cost only c)Holding cost only d) All the above

2. The purpose of using simulation technique is to [ ]
   a) simulate a real world situation
   b) understand properties and operating characteristics of complex real life problems
   c) reduce the cost of experiment on a model of a real situation
   d) all of the above

3. Which of the following is not the special purpose simulation language [ ]
   a) BASIC b) GPSS c) GASP d) SIMSCRIPT

4. As simulation is not and alytical model, therefore result of simulation must be viewed as [ ]
   a) unrealistic b) exact c) approximation d) simplified

5. The important step required for simulation approach in solving a problem is to [ ]
   a) test and validate the model b) design the experiment
   c) conduct the experiment d) all of the above

6. The return function in a dynamic programming model depends on [ ]
   a)stages b) states c) alternatives d) all of the above

7. A translation function is expressed as [ ]
   a) $s_{n-1} = t_n(s_n, d_n)$ b)$s_n = t_n(s_{n-1}, d_{n-1})$
   c)$s_{n+1} = t_n(s_{n+2}, d_{n+2})$ d) all of the above

8. Customer behavior in which he moves from one queue to another in a multiple channel situation is [ ]
   a) Balking b) reneging c) jockeying d) alternating

9. Which symbol describes the inter-arrival time distribution [ ]
   a) D b) M c) G d) All the above

10. If EOQ is calculated but an order is then placed which is smaller than this will the variable cost [ ]
    a) Increase b) decrease c)either increase or decrease d) no change

Cont.....2

II Fill in the Blanks:

11. As the complexity of a model increases simulation seeks to _____ the uncertainty in the model.

12. Simulation is the process of a model of a real system and conducting _____

13. Using simulation for queuing problem would be appropriate if the _____ follows a poisson distribution.

14. In the _____ the arrival of customers depends on the nature of arrival rate.

15. The _____ is controlled by both service facility and the customers.

16. The _____ distribution provides probabilities for time gap between two consecutive arrivals.

17. The payment of telephone bills by a cheque or cash is the example of dynamic _____

18. The _____referred to the number of units of an item required in each period.

19. Re order level = demand during _____ lead time.

20. _____ incurred by having demand for a product when the inventory is completely deflected.

-oOo-

Code No: 58121 **Set No. 3**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

OPERATION RESEARCH

Objective Exam

Name: _____ Hall Ticket No. | | | | | | A | | | | |

Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. Which of the following is not the special purpose simulation language [ ]
   a) BASIC b) GPSS c) GASP d) SIMSCRIPT

2. As simulation is not and alytical model, therefore result of simulation must be viewed as [ ]
   a) unrealistic b) exact c) approximation d) simplified

3. The important step required for simulation approach in solving a problem is to [ ]
   a) test and validate the model b) design the experiment
   c) conduct the experiment d) all of the above

4. The return function in a dynamic programming model depends on [ ]
   a)stages b) states c) alternatives d) all of the above

5. A translation function is expressed as [ ]
   a) $s_{n-1} = t_n(s_n, d_n)$ b)$s_n = t_n(s_{n-1}, d_{n-1})$
   c)$s_{n+1} = t_n(s_{n+2}, d_{n+2})$ d) all of the above

6 Customer behavior in which he moves from one queue to another in a multiple channel situation is [ ]
   a) Balking b) reneging c) jockeying d) alternating

7. Which symbol describes the inter-arrival time distribution [ ]
   a) D b) M c) G d) All the above

8. If EOQ is calculated but an order is then placed which is smaller than this will the variable cost [ ]
   a) Increase b) decrease c)either increase or decrease d) no change

9. Which costs can vary with order quantity [ ]
   a) unit cost only b) Re order cost only c)Holding cost only d) All the above

10. The purpose of using simulation technique is to [ ]
    a) simulate a real world situation
    b) understand properties and operating characteristics of complex real life problems
    c) reduce the cost of experiment on a model of a real situation
    d) all of the above

Cont.....2

II Fill in the Blanks:

11. Using simulation for queuing problem would be appropriate if the _____ follows a poisson distribution.

12. In the _____ the arrival of customers depends on the nature of arrival rate.

13. The _____ is controlled by both service facility and the customers.

14. The _____ distribution provides probabilities for time gap between two consecutive arrivals.

15. The payment of telephone bills by a cheque or cash is the example of dynamic _____

16. The _____referred to the number of units of an item required in each period.

17. Re order level = demand during _____ lead time.

18. _____ incurred by having demand for a product when the inventory is completely deflected.

19. As the complexity of a model increases simulation seeks to _____ the uncertainty in the model.

20. Simulation is the process of a model of a real system and conducting _____

-oOo-

Code No: 58121 **Set No. 4**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

OPERATION RESEARCH

Objective Exam

Name: _____ Hall Ticket No. | | | | | | A | | | | |

Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. The important step required for simulation approach in solving a problem is to [ ]
   a) test and validate the model b) design the experiment
   c) conduct the experiment d) all of the above

2. The return function in a dynamic programming model depends on [ ]
   a)stages b) states c) alternatives d) all of the above

3. A translation function is expressed as [ ]
   a) $s_{n-1} = t_n(s_n, d_n)$ b)$s_n = t_n(s_{n-1}, d_{n-1})$
   c)$s_{n+1} = t_n(s_{n+2}, d_{n+2})$ d) all of the above

4. Customer behavior in which he moves from one queue to another in a multiple channel situation is [ ]
   a) Balking b) reneging c) jockeying d) alternating

5. Which symbol describes the inter-arrival time distribution [ ]
   a) D b) M c) G d) All the above

6. If EOQ is calculated but an order is then placed which is smaller than this will the variable cost [ ]
   a) Increase b) decrease c)either increase or decrease d) no change

7. Which costs can vary with order quantity [ ]
   a) unit cost only b) Re order cost only c)Holding cost only d) All the above

8. The purpose of using simulation technique is to [ ]
   a) simulate a real world situation
   b) understand properties and operating characteristics of complex real life problems
   c) reduce the cost of experiment on a model of a real situation
   d) all of the above

9. Which of the following is not the special purpose simulation language [ ]
   a) BASIC b) GPSS c) GASP d) SIMSCRIPT

10. As simulation is not and alytical model, therefore result of simulation must be viewed as [ ]
    a) unrealistic b) exact c) approximation d) simplified

Cont.....2

II Fill in the Blanks:

11. The _____ is controlled by both service facility and the customers.

12. The _____ distribution provides probabilities for time gap between two consecutive arrivals.

13. The payment of telephone bills by a cheque or cash is the example of dynamic _____

14. The _____referred to the number of units of an item required in each period.

15. Re order level = demand during _____ lead time.

16. _____ incurred by having demand for a product when the inventory is completely deflected.

17. As the complexity of a model increases simulation seeks to _____ the uncertainty in the model.

18. Simulation is the process of a model of a real system and conducting _____

19. Using simulation for queuing problem would be appropriate if the _____ follows a poisson distribution.

20. In the _____ the arrival of customers depends on the nature of arrival rate.

-oOo-