Assignment 3

The due date for submitting this assignment is passed.

As per your records you have not submitted this assignment.

1. Which of the correct formulas for basic exponential smoothing is correct? Here is a smoothing constant.
   - Forecast 1 = (Current Demand) + (a) (Previous Error)  [Due date: 2020-02-18, 23:49 IST]
   - Forecast 1 = (Current Demand) + (a) (Previous Forecast)
   - Forecast 1 = Current Demand + 2 (Previous Read)
   - None of the above
   - The answer is incorrect.
   - Accepted Answers: 9.1.1.1

2. Generally, which of the following cut-off criteria is best for smoothing constant?
   - 0
   - 1
   - None of the above
   - Accepted Answers: 9.1.1.1.1

3. Let us consider alpha as 0.1. Is the forecast for the March month as 60 units and demand in the month February happened to be 60 units. What will be the forecast for the month of March?
   - forecast = 60 units
   - forecast = 40 units
   - forecast = 80 units
   - None of the above
   - The answer is incorrect.
   - Accepted Answers: 9.1.1.2

4. Let us consider alpha as 0.1. Is the forecast for the March month as 60 units and demand in the month February happened to be 60 units. What will be the forecast for the month of March?
   - forecast = 60 units
   - forecast = 40 units
   - forecast = 80 units
   - None of the above
   - Accepted Answers: 9.1.1.2.1

5. Which of the above smoothing method, value of alpha is taken as 2.
   - Simple Exponential Smoothing
   - Brown's Exponential Smoothing
   - Weighted Exponential Smoothing
   - None of the above
   - Accepted Answers: 9.1.1.2.2

6. Given the following table:
<table>
<thead>
<tr>
<th>Month</th>
<th>Actual Demand</th>
<th>Base Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>30.0</td>
<td>25.0</td>
</tr>
<tr>
<td>February</td>
<td>25.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>

   What is the forecast for the March month?
   - 25.07
   - 22.69
   - 32.4
   - Cannot be determined
   - Accepted Answers: 9.1.1.2.3

7. Which of the above smoothing methods, value of alpha is taken as 0.5?
   - Simple Exponential Smoothing
   - Brown's Exponential Smoothing
   - Weighted Exponential Smoothing
   - None of the above
   - Accepted Answers: 9.1.1.2.4

8. Consider the following table:
<table>
<thead>
<tr>
<th>Period</th>
<th>Demand</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>35</td>
<td>30</td>
</tr>
</tbody>
</table>

   What is the value of Mean Absolute Deviation at the end of fifth period using data given in the above table?
   - 1.4
   - 1.1
   - 1.0
   - None of the above
   - Accepted Answers: 9.1.1.2.5

9. Which of the above smoothing methods, value of alpha is taken as 0.5?
   - Simple Exponential Smoothing
   - Brown's Exponential Smoothing
   - Weighted Exponential Smoothing
   - None of the above
   - Accepted Answers: 9.1.1.2.6

10. Consider the following table:
    | Period | Demand | Forecast |
    |--------|--------|---------|
    | 1      | 20     | 15      |
    | 2      | 22     | 20      |
    | 3      | 25     | 22      |
    | 4      | 30     | 25      |
    | 5      | 35     | 30      |

    What is the value of tracking signal at the end of third period using data given in the above table?
    - 0.1
    - 0.5
    - 0.7
    - None of the above
    - Accepted Answers: 9.1.1.2.7