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**College of Administrative and Financial Sciences**

**Assignment 2**

**Deadline: 03/04/2021 @ 23:59**

**Academic Year: 2020-21**

|  |  |
| --- | --- |
| Course Name: **Intro. to Operations Management** | Student’s Name: |
| Course Code: **MGT311** | Student’s ID Number: |
| Semester: **II** | CRN: |

**For Instructor’s Use only**

|  |  |
| --- | --- |
| Instructor’s Name: | |
| Students’ Grade: **XX/ 05.00** | Level of Marks: High/Middle/Low |

**Instructions – PLEASE READ THEM CAREFULLY**

* The Assignment must be submitted on Blackboard (**WORD format only**) via allocated folder.
* Assignments submitted through email will not be accepted.
* Students are advised to make their work clear and well presented, marks may be reduced for poor presentation. This includes filling your information on the cover page.
* Students must mention question number clearly in their answer.
* Late submission will NOT be accepted.
* Avoid plagiarism, the work should be in your own words, copying from students or other resources without proper referencing will result in ZERO marks. No exceptions.
* All answered must be typed using **Times New Roman (size 12, double-spaced)** font. No pictures containing text will be accepted and will be considered plagiarism).
* Submissions without this cover page will NOT be accepted.

**Learning Outcome:**

* Describe the concept of operations functions, supply chain strategy, process selection, forecasting, capacity planning, production forecast methods and schedule operations.
* Demonstrate process-flow analysis, process design solutions, operations strategies, Inventory Control System and customer services in the business operation.

**Assignment Question(s):** **(Marks 5)**

**Question 2:**

An Electronic Company estimates the annual demand for a certain product as follows:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Week | 1 | 2 | 3 | 4 | 5 | 6 |
| Demand | 649 | 524 | 561 | 738 | 515 | 598 |

1. Forecast the demand for week 7 using a five-period moving average? (Marks 1.5) (word count maximum:100)
2. Forecast the demand for week 7 using a three-period weighted moving average. Use the following weights: W1 = .4, W2 = .4, W3 = .2 (Marks 1.5) (word count maximum:100)
3. Forecast the demand for week 7 using exponential smoothing. Use α value of .1 and assume the forecast for week 6 was 602 units? (Marks 1.5) (word count maximum:100)
4. What assumptions are made in each of the above forecasts? (Marks 0.5) (word count maximum:150)