

ONLINE ASSESSMENT

| FACULTY/COLLEGE | College of Business and Economics | | |
|-------------------------|-----------------------------------|--|--|
| SCHOOL | School of Management | | |
| DEPARTMENT | Business Management | | |
| CAMPUS | APB | | |
| MODULE NAME | Operations Management | | |
| MODULE CODE | AC10PSM | | |
| SEMESTER | Second | | |
| ASSESSMENT OPPORTUNITY, | Final Supplementary Summative | | |
| MONTH AND YEAR | Assessment | | |
| | January 2021 | | |

| ASSESSMENT DATE | January 2021 | SESSION | | |
|-----------------|----------------|-------------|-----|--|
| ASSESSOR | Dr V Kalitanyi | | | |
| MODERATOR | Dr T Chuchu | | | |
| DURATION | 120 minutes | TOTAL MARKS | 100 | |

| NUMBER OF PAGES OF QUESTION PAPER (Including cover page) | 4 |
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INFORMATION/INSTRUCTIONS:

- This is a closed-book assessment.
- Read the questions carefully and answer only what is asked.
- Answer all the questions:
- Number your answers clearly.
- Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.
- Structure your answers by using appropriate headings and subheadings.
- The general University of Johannesburg policies, procedures and rules pertaining to written assessments apply to this assessment.

Declaration of original work

Submitting this assessment serves to declare that my academic work is in line with the Plagiarism Policy of the University of Johannesburg which I am familiar with. I further declare that the work presented is authentic and original. I understand that plagiarism is a serious offence and should I contravene the Plagiarism Policy, I may be found guilty of a serious criminal offence (perjury).

QUESTION 1 [15 MARKS]

Use the following table to answer question 1.1

| Year | 2017 | 2017 | 2017 | 2017 | 2018 | 2018 | 2018 | 2018 |
|---------|------|------|------|------|------|------|------|------|
| Quarter | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Demand | 112 | 104 | 86 | 124 | 122 | 107 | 91 | 131 |

- 1.1 Make a forecast for the third quarter of 2018, using exponential smoothing with a forecast for the second quarter of 2018 of 112 and a smoothing constant (alpha) of 0.2. (5)
- 1.2 Briefly discuss any four limitations of forecasting. (4)
- 1.3 Differentiate between Delphi technique and Expert opinion. (6)

QUESTION 2 [23 MARKS]

- 2.1 Discuss why it is important to study operations management. (8)
- 2.2 Sizwe has a small bread bakery shop in Limpopo where she employs eight employees, two cleaners and six bakers, helping with the production of bread. On average, they make 270 loaves of bread per day. She pays the cleaners R15 per hour and the bakers R70 per hour. The staff work seven hours per day, five days per week. They use 100 kilograms of flour polish per day. The cost per 10 kilograms of flour polish is R40. The electricity is R1 000 per four-week month. Calculate the total productivity. (15)

QUESTION 3 [10 MARKS]

Discuss the differences in operations management in a service organisations and in a manufacturing organisation.

QUESTION 4 [12 MARKS]

- 4.1 Briefly explain four (4) determinants of quality in operations management (8)
- 4.2 List and explain four (4) dimensions of service quality (4)

QUESTION 5 [10 MARKS]

The following are the needed inputs in a service operation of hair dressing:

- Salon premises
- Chairs
- Mirrors
- Dryers
- Shampoo
- Hairdressers
- Customers
- Bookings
- Style design
- Basins

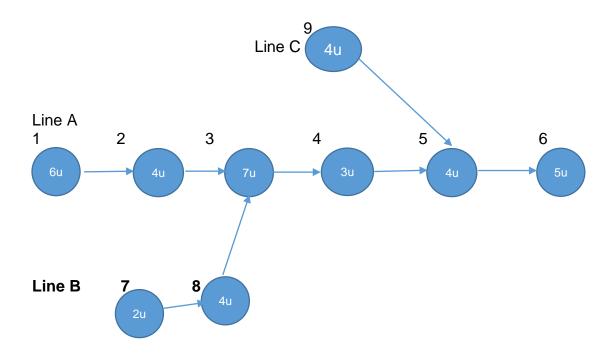
Classify them in two categories as they are whether transformed or transforming inputs.

QUESTION 6 [10 Marks]

List five different process types under manufacturing and five different process types under service

QUESTION 7 [20 Marks]

- A. Define the concept of "bottleneck" and identify which workstation is a bottleneck in the process Line A below. (4)
- B. How many units will be the final outputs of this process? (4)



- - C. If Line B is included in the process, which workstation is a bottleneck? (4)
 - D. If Line C is included in the process, to which workstation does the bottleneck shift? (4)
 - E. With this inclusion of Line C, how many units will come out of the process as the final outputs? (4)

END OF ASSESSMENT