

**W1-2-60-1-6**

## JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

**UNIVERSITY EXAMINATIONS 2018/2019**

**YEAR 3 SEMESTER 1 EXAMINATIONS FOR THE DEGREE OF BACHELOR OF PROCUREMENT AND CONTRACT MANAGEMENT**

**HPS 2209: OPERATIONS MANAGEMENT**

**DATE: AUGUST 2019 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE**

1. Define the following terminologies:
2. Supply chain management
3. Operations
4. Productivity
5. Value chain
6. Division of labour
7. Order qualifiers
8. Mass production
9. Competitiveness
10. Although all operation processes are similar in that they transfer input, they differ in a number of ways with relevant examples list and describe their characteristics (12 marks)
11. Orbarne Industries is sampling the monthly productivity report for in Board of Directors. From the following data, calculate:
12. Labour productivity (2 marks)
13. Machine productivity (2 marks)
14. The multifactor productivity of dollars spent are labour, machine, material and energy (6 marks)

The average labour valt is 815 an hour, the average machine usage valt is 810 at hour.

Units produced - 100,000

Labour hours - 10,000

Machine hours - 5,000

Cost of material - $35,000

Cost of energy - $15,000

**QUESTION TWO (20 MARKS)**

Explain the five steps of strategy formulation.

**QUESTION THREE**

1. Describe at least 8 differences between service and manufactured goods (8 marks)
2. Layout design concerns the physical placement of resources such as equipment and storage facilities. Describe the characteristics of the basic layout types (12 marks)

**QUESTION FOUR**

1. The purpose of time study is through the use of statistical techniques to arrive at standard time for performing one cycle time of a repetitive job. Outline the basic steps in a time study (14 marks)
2. i) Define the term Economic Order Quantity (EOQ) (1 mark)

ii) What are the assumptions in the EOQ model (5 marks)

**QUESTION FIVE**

Write short notes on the following:

1. Inventory management
2. Job enlargement
3. Project management activities
4. Motion study
5. JIT pull systems