

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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**University Examinations 2015/2016**

FOURTH YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE

**BFB 3358: PRODUCTION AND OPERATIONS MANAGEMENT**

**DATE: AUGUST, 2016 TIME: HOURS**



**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions.*

**QUESTION ONE (30 MARKS)**

1. Discuss the following terms as used in Production and Operations Management:
2. Operation Research (2 Marks)
3. Scheduling (2 Marks)
4. MRP System (2 Marks)
5. Quality Circle (2 Marks)
6. Plant layout (2 Marks)
7. In production plant, the following production duration are given;

Optimistic time = 4 hours

Most likely time = 6 hours

Pessimistic time = 2 hours

Use the PERT formular to determine the expected time to complete the production process. (5 Marks)

1. Describe the key functions of a production control department. (5 Marks)
2. Explain the factors that influence design of products. (5 Marks)
3. Evaluate the internal factors that determine the schedule programme of a production plant. (5 Marks)

**QUESTION TWO (20 MARKS)**

1. Discuss the phases of production planning in manufacturing plant. (10 Marks)
2. By use of a diagram, explain the relationship between master production schedule and material requirement planning (MRP). (10 Marks)

**QUESTION THREE (20 MARKS)**

1. Explain various techniques used in routing. (10 Marks)
2. Discuss the steps you would involve in new product development as production and operation manager in your organization. (10 Marks)

**QUESTION FOUR (20 MARKS)**

1. You have just been appointed the production and operations manager of the University (MUST). Advise the Board of management of the challenges they are likely to address as they expand the services by opening a new campus in Kigali Rwanda. (10 Marks)
2. Discuss the reasons that spurred the trend of most organizations towards globalization.

(10 Marks)