

# MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

# UNIVERSITY EXAMINATIONS 2019/2020 ACADEMIC YEAR

## SEMESTER TWO EXAMINATIONS

## FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL AND STRUCTURAL (FOURTH YEAR), MECHANICAL AND INDUSTRIAL (FOURTH YEAR), ELECTRICAL AND COMMUNICATION (FOURTH YEAR) ENGINEERING

COURSE CODE: ECC 406

## COURSE TITLE: ENGINEERING MANAGEMENT

# DATE: WEDNESDAY 4<sup>TH</sup> NOVEMBER 2020 TIME: 9.00 - 11.00 AM

## **INSTRUCTIONS:**

- 1. This paper contains FOUR questions
- 2. QUESTION ONE IS COMPULSORY
- 3. Attempt any TWO questions from the remaining.
- 4. Question ONE carries 30 marks and the REST 20 marks each.
- 5. Examination duration is 2 (TWO) HOURS

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 3 Printed Pages. Please Turn Over.

ECC 406 ENGINEERING MANAGEMENT

### **QUESTION ONE (30Marks)**

#### CASE STUDY

Diane a nurse at Mbama General Hospital has given a resignation letter to the administrative director of her hospital. This letter has been given by her stating the reason that she has not been able to get her job done. She explains, referring to one of the day's work, that she walks into her office at 7.45 a.m. she finds a message on her desk from the hospitals head nurse asking her to give the hospitals bed occupation by 10.00 a.m. that morning as she has to present it to the hospital board that afternoon. After some time she finds her immediate supervisor Jeanine walking into her office & enquiring to her about two nurses who were not on duty on the floor that day. She asks Diane to get things sorted out immediately & ensure within an hour that both the nurses are back on duty at their floors.. Diane does not know which of the supervisors order to do first. On further inquiry she is informed that the nurses had permission from a senior nurse.

Mbama had a history of transferring nurses to different locations after a short period of time. The longest a nurse at Mbama can stay in on location is six months. The management thinks that this is good as it prevents bad culture from infiltrating the hospital. The management also encourages the nurses to perform different tasks and thus they are expected to be knowledgeable in different aspects of the nursing. Thus nurses are not encouraged to specialize in any part. Diane feels frustrated and harassed by the fact that she has to obey different bosses, has no control of the nurses that work under her and cannot even estimate how long she would be working in her current station.

a) List the four principles of management that are not followed by Mbama Hospital (4 marks)

b) Discuss the importance of applying each of the named four principles above in (a) in managing an organization? (**12 marks**)

c) Name the other 10 management principles not covered in (a) above (5 marks)

d) Discuss the differences between Unity of Command and Unity of Direction in respect to Meaning, Necessity ,Advantage and Result (9 marks)

## **QUESTION TWO (20Marks)**

- i) Discuss the characteristics of Bureaucracy and their application as propounded by Max Weber in modern organization. [10 marks]
- ii) What is Hawthorne effect and why is it important to managers? [5 marks]
- iii) Briefly explain the Maslow's hierarchy of needs theory of motivation [5 marks]

### **QUESTION THREE (20Marks)**

- a) Plans commit the various resources in an organization to specific outcomes for the fulfillment of future goals. Many different types of plans are adopted by management to monitor and control organizational activities. Discuss in detail the three most commonly used plans and their importance to the Organization. (9 Marks)
- b) Explain the Controlling Process as one of the management functions (11 Marks)

#### **QUESTION FOUR (20Marks)**

The reason quality has gained prominence is that organizations have gained an understanding of the high cost of poor quality. The most obvious consequence occurs when poor quality creates dissatisfied customers and eventually leads to loss of business. However, quality has many other costs. Discuss in detail these costs.