

# ELIZADE UNIVERSITY, ILARA-MOKIN, ONDO STATE, NIGERIA

# DEPARTMENT OF MECHANICAL, AUTOMOTIVE AND PRODUCTION **ENGINEERING**

## SECOND SEMESTER EXAMINATIONS

# 2016/2017 ACADEMIC SESSION

**COURSE:** 

MEE 306 – Workshop Practice

(2 Units)

CLASS:

300 Level Mechanical & Automotive Engineering

TIME ALLOWED: 2 Hours

**INSTRUCTIONS:** Answer any four questions

HOD'S SIGNATURE

Date: July/August, 2017

# Question 1

(a) What do you understand by workshop setting? (5 marks)

- (b) List five important factors for installation of plant in workshop (5 marks)
- (c) Discuss five criteria for good layout (10 marks)
- (d) Having performed various workshop practices in the University workshop, sketch-out the plant layout. Advice where necessary for a better positioning (5 marks)

#### **Question 2**

- (a) Write short note on three types of workshop layout (9 marks)
- (b) Mention two basic types of chip in machining (4 marks)
- (c) Enumerate three merits of a good layout (6 marks)
- (d) Describe two types of metal removal processes (6 marks)

# Question 3

- (a) With a sketch diagram, what do you understand by a lathe machine? (7 marks)
- (b) Lathe machine is considered as the father of all machines and the most important workshop tool. Discuss. (5 marks)
- (c) Write short note on four parts of a lathe machine (8 marks)
- (d) List five functions of cutting fluids in machining operations (5 marks)

# **Question 4**

- (a) Discuss with sketches four important machining operations (12marks)
- (b) Differentiate between milling operations and turning operations (4marks)
- (c) Why is machining important in workshop practice? (5marks)
- (d) Mention two disadvantages of machining processes (4marks)

### **Question 5**

- (a) What do you understand by CNC? (5marks)
- (b) Typical CNC system consists of six elements. Mention four of them (4marks)
- (c) Write short note on three advantages of CNC and two disadvantages (10marks)
- (d) Write short notes on two CNC machines feedback devices (6marks)

## Question 6

- (a) What is workshop safety? (5marks)
- (b) Enumerate ten safety precautions in the workshop. (10marks)
- (c) What are the objectives of industrial safety? (4marks)
- (d) Describe three types /categories of hazards in the workshop (6marks)