



ELIZADE UNIVERSITY, ILARA-MOKIN, ONDO STATE,
NIGERIA
DEPARTMENT OF MECHANICAL ENGINEERING

SECOND SEMESTER EXAMINATIONS

2017/2018 ACADEMIC SESSION

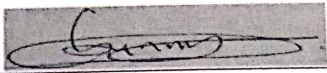
COURSE: GNE 202 – Workshop Practice and Manufacturing
Technology (3 Units)

CLASS: 200 Level General Engineering

TIME ALLOWED: 3 hrs.

INSTRUCTIONS: Answer Four (4) questions. [Two (2) questions from each section]

Date: July/August, 2018


HOD'S SIGNATURE

SECTION A

Question 1

- What do you understand by plant layout? Mention five (5) merits of a good plant layout?
- Describe the various types of layout.
- What is "Production?"
- Describe the various types of production system.

Question 2

- What do you understand by Industrial Safety and what are its objectives?
- What is an Accident? Enumerate three (3) effects of an accident on the society, worker and owner of factory.
- Describe the different types of guards used for safeguarding against dangerous parts.
- Mention five (5) safety precautions to be taken in a workshop.

Question 3

- What are the differences between Smithing and Forging?
- Give 5 differences between "Hearth" and "Furnace".
- Explain with diagram, the following forging equipment: a) Swage block b) Swages
c) Anvil d) Tong e) Flatters

- (d) Mention the classification of properties of metal and describe any 5 mechanical properties of materials.

SECTION B

Question 4

- (a) Explain five operations that could be carried out on lathe machine.
- (b) What is the function of the following parts on the lathe machine?
- i. Tail stock spindle
 - ii. Spindle speed display
 - iii. Carriage or saddle
 - iv. Tool post
 - v. Tool holder
- (c) Analyze in brief, the procedures for carrying out step turning operation of a rod on engine lathe.
- (d) Mention any two (2) safety rules on engine lathe.

Question 5

- (a) What do you understand by the term “Carpentry”?
- (b) Distinguish between *work bench* and *bench work*.
- (c) State five (5) classes of tools used in carpentry and mention at least two (2) tools under each category.
- (d) Explain auxiliary materials and give (4) examples used in Carpentry work?

Question 6

- (a) Define the term *welding* and what are the classification of welding?
- (b) What is Weldability of a metal and what are the factors affecting the weldability of a metal?
- (c) Explain and draw types of welded joint.
- (d) Give five safety precaution to observe when operating electric arc welding.