

1501/202 1508/202
1503/202
**WORKSHOP ORGANIZATION AND
MANAGEMENT**
June/July 2018
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

**CRAFT CERTIFICATE IN MECHANICAL ENGINEERING
(PRODUCTION OPTION)
CRAFT CERTIFICATE IN AUTOMOTIVE ENGINEERING
CRAFT CERTIFICATE IN WELDING AND FABRICATION**

MODULE II

WORKSHOP ORGANIZATION AND MANAGEMENT

3 hours

INSTRUCTIONS TO CANDIDATES

*You should have an answer booklet for this examination.
Answer **FIVE** of the following **EIGHT** questions.
All questions carry equal marks.
Maximum marks for each part of a question are as shown.
Candidates should answer the questions in English.*

This paper consists of 4 printed pages.

**Candidates should check the question paper to ascertain that
all the pages are printed as indicated and that no questions are missing.**

1. (a) (i) Outline the steps involved in planning as a function of management.
 (ii) List **four** recording techniques use in work study. ✓
 (10 marks)

(b) Explain **three** operational outcomes of the scientific management theory by F. W. Taylor. (6 marks)

(c) Highlight **four** benefits enjoyed by an industry that engages in activities which promote welfare of society. (4 marks)

- 2 ✓ (a) (i) Explain the term 'machine loading'. *Condition of machine to work efficiently and operator without fatigue*
 (ii) Outline **four** ways a production manager may apply to compensate for shortfall in production due to poor machine loading. *quantity, time*
 (6 marks)

(b) Identify **four** methods that are used by industries to monitor work progress during production. (4 marks)

(c) Most factories that engage in batch production are usually very concerned about the size of the batches. Highlight **four** factors that may affect the size of the batch. *all make products*
 (4 marks)

(d) (i) Explain the term 'productivity'. *the result in production less input*
 (ii) Outline **four** strategies a company may use to maximise productivity. *Research, productivity, productivity in efficiency*
 (6 marks)

- 3 ✓ (a) (i) Outline **three** objectives of method study. *Facilitate production control, Fewer mistakes, Introduce new personnel*
 (ii) Explain the procedure for method study. *Research, research, study*
 (10 marks)

(b) (i) List **four** recording techniques used in work study. ✓
 (ii) Highlight **two** types of allowances in work study. *Procedure of work study*
 (4 marks)

(c) (i) With the aid of a diagram, describe the product layout of a production plant.
 (ii) State **three** advantages of the product layout. *Procedure of work study*
 (6 marks)

- 4
- (a) Explain the following principles of quality control:
- (i) process approach;
 - (ii) systems approach.
- (4 marks)
- (b) Outline five desirable characteristics of a quality control inspector. (5 marks)
- (c) Highlight five causes of faults in manufactured products which may make it necessary to carry out inspection. *fault in machine, material, operator, method, environment* (5 marks)
- (d) Describe the three stages of inspection during a production process. *Final, In-process, Pre-production* (6 marks)

- 5
- (a) Distinguish between purchasing through 'Quotation' and purchasing through 'contract'. (4 marks)
- (b) Explain three function of a purchasing department. (6 marks)
- (c) A juice processing company incurred the following costs for the month of November 2015.

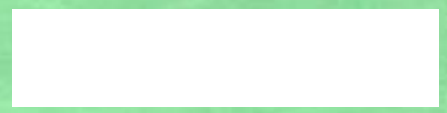
| Cost | Value (Kshs) |
|-------------------------------|--------------|
| Purchase of fruits | 150,000 |
| Electricity bill | 20,000 |
| Packaging materials | 50,000 |
| Plant operators' salaries | 120,000 |
| Jigs and templates | 30,000 |
| Administrative staff salaries | 100,000 |
| Quality control expenses | 30,000 |
| Selling and distribution | 40,000 |

Final
 Inspect 100% of finished product immediately prior to packaging

In-process
 Products are produced in a plant from stage to stage during production

Pre-production
 All functions would be checked to control point whereby one inspector would possibly have to check production process

- (i) Identify:
- (I) prime costs;
 - (II) production overheads.
- (4 marks)
- (ii) Calculate:
- (I) total prime costs;
 - (II) total production overheads;
 - (III) cost of production per unit if 10,000 units were produced.
- (6 marks)



6. (a) Highlight the **four** elements of the marketing mix. (4 marks)
- (b) Outline **three** advantages of distributing goods directly to customers. (3 marks)
- (c) Highlight **five** factors that may make a customer to buy from one supermarket instead of another. (5 marks)
- (d) (i) Outline **five** duties of a sales manager. (4 marks)
- (ii) With examples, describe the meaning of the term "after-sale services" with respect to a motor vehicle spare parts shop. (8 marks)

*Test
Introduction
Discount & Volume*

- 7/ (a) Three graduates of a Technical Training Institute intend to start a partnership business. Enlighten them on the following:
- (i) meaning of a 'partnership deed';
- (ii) the importance of drawing up a partnership deed;
- (iii) **four** disadvantages of a partnership business. (10 marks)

- (b) Identify **five** types of illegal contracts. (5 marks)

- (c) (i) Explain the meaning of a 'negotiable instrument' of exchange;
- (ii) Give **two** examples of negotiable instruments. (5 marks)

- 8 (a) Explain the following general defences to a tort:
- (i) act of God;
- (ii) inevitable accident. (4 marks)

- (b) Explain **four** ways of improving industrial relations in an organisation. (8 marks)

- (c) (i) State the meaning of 'joint consultation' as used in industrial relations.
- (ii) Highlight **four** essential factors which should be considered by the parties to achieve successful joint consultation. (8 marks)

It is an article or document that contains the agreement of parties

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