

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. (10 marks)
- (ii) List **four** recording techniques use in work study. ✓
- (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* (6 marks)
- (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'. *Market trend of technological systems, Target production & resources, Cost of a finished product, Availability of raw material, Process engine* (6 marks)
- (ii) Outline **four** strategies a company may use to maximise productivity. *the result in production*
3. (a) (i) Outline **three** objectives of method study. *Research, Research, Research, Facilitate production control, Fewer work zone, Intimidation, profit, personnel* (6 marks)
- (ii) Explain the procedure for method study. *Research, Research, Research* (10 marks)
- (b) (i) List **four** recording techniques used in work study. ✓
- (ii) Highlight **two** types of allowances in work study. (4 marks)
- (c) (i) With the aid of a diagram, describe the product layout of a production plant. *Procedure of work study*
- (ii) State **three** advantages of the product layout. (6 marks)

- 4
- (a) Explain the following principles of quality control:
- (i) process approach;
  - (ii) systems approach.
- (b) Outline five desirable characteristics of a quality control inspector.
- (c) Highlight five causes of faults in manufactured products which may make it necessary to carry out inspection.
- (d) Describe the three stages of inspection during a production process.

- 5
- (a) Distinguish between purchasing through 'Quotation' and purchasing through 'contract'.
- (b) Explain three function of a purchasing department.
- (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

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

*Flow*  
 Inspect 1 or more inspection of product immediately prior to processing

*Flour*  
 Products are produced after inspection from stage to stage during production

*Control*  
 all finished goods are checked to control point whereby one inspector check possibly have to the next inspection process

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)  
*Test, Incentive, Discount & Value*
- (d) (i) Outline **five** duties of a sales manager. (5 marks)  
*PL*
- (ii) With examples, describe the meaning of the term "after-sale services" with respect to a motor vehicle spare parts shop. (8 marks)

- 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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