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KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR

FOURTH YEAR FIRST SEMESTER
MAIN EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF SCIENCE
IN RENEWABLE ENERGY AND BIOFUELS TECHNOLOGY

COURSE CODE: IPT 450

COURSE TITLE: INDUSTRIAL ORGANISATION AND PRODUCTION
ECONOMICS

DURATION: 2 HOURS

DATE: FRIDAY 22ND DECEMBER 2017 **TIME:** 8.00 – 10.00 AM

INSTRUCTIONS TO CANDIDATES

- Answer **QUESTION ONE** (Compulsory) and any other two (2) Questions.
- Question one has a total of **30 marks** whereas questions two to five is each **20 Marks**
- Indicate **answered questions** on the front cover.
- Start every question on a new page and make sure question's number is written on each page.

This paper consists of **3** printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

QUESTION ONE (30 MARKS)

- (a) (i) Explain the relationship between management and administration. (6 marks)
(ii) Highlight **three** features of the classical theory of management
- (b) (i) In a company the output of production is 140 kg and the input of the production is 160 kg. Determine the productivity. (5 marks)
(iii) Explain **three** factors that may influence the structure of an organisation. (5 marks)
- (c) (i) Differentiate between work study and work measurement. (5 marks)
(ii) Identify **three** limitations of work study.
- (d) Explain the following types of wages: (6 marks)
(i) real wages;
(ii) living wages;
(iii) minimum wages. (8 marks)
- (e) Explain **four** factors of production.

QUESTION TWO (20 MARKS)

- (a) (i) Define management. (6 marks)
(ii) State **four** functions of management.
- (b) Outline **four** limitations of scientific management theory as put forward by Fredrick Taylor. (4 marks)
- (c) Explain how the following principles of management theory by Henry Fayol could be useful in modern management: (10 marks)
(i) division of work;
(ii) authority;
(iii) discipline;
(iv) unity of direction
(v) unity of command.

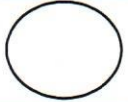
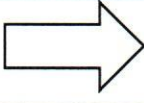
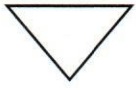
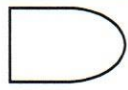
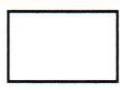
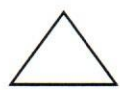
QUESTION THREE (20 MARKS)

- (a) (i) Explain the term vertical organisation. (6 marks)
(ii) State **four** advantages of vertical organisations.
- (b) Explain **three** circumstances under which delegation may be appropriate in an organisation. (6 marks)
- (c) A company has the following positions: Board of directors, Production Supervisors, Finance Manager, Managing Director, Personnel Manager, Production Foreman, Production Controller, Quality Assurance Manager and Workmen. (8 marks)
Draw an organisational chart, clearly showing the line and staff authorities.

QUESTION FOUR (20 MARKS)

- (a) (i) Highlight **three** benefits of work study in an organization. (8 marks)
(ii) Explain the procedure of work measurement.
- (b) Explain **three** reasons why many workers are usually uncomfortable with work study being carried out in their organizations. (6 marks)
- (c) Table 1 shows symbols of operation as used in work study. Fill in the blank spaces with the appropriate information. (6 marks)

Table 1

Symbol No.	Symbol	Description	Purpose
1.		_____	_____
2.		_____	_____
3.		_____	_____
4.		_____	_____
5.		_____	_____
6.		_____	_____

QUESTION FIVE (20 MARKS)

(a) (i) State the importance of economics in engineering.

(ii) Explain the following terms:

- (I) Prime costs;
- (II) Fixed costs;
- (III) Variable costs;
- (IV) Indirect costs.

(10 marks)

(b) The following information was obtained from the books of SolarTech manufacturers for the year ended 31/12/2016.

Items	Ksh.
Factory rent	36,000
Direct wages	24,000
Stock of raw materials at 1/1/2016	10,000
Stock of raw materials at 31/12/2016	16,000
Purchase of raw materials	342,000
Repairs of plant	21,000
Factory power	18,000
Direct expenses	22,000

Use the information above to prepare cost statement for the year ended 31/12/2016 showing:

- (i) cost of raw materials used;
- (ii) prime cost;
- (iii) total factory overheads;
- (iv) total production cost.

(10 marks)