



*(A constituent college of Jomo Kenyatta University of Agriculture and Technology)*

**SCHOOL OF ENGINEERING AND TECHNOLOGY**  
**DEPARTMENT OF MECHANICAL ENGINEERING**  
**DIPLOMA AUTOMOTIVE/PRODUCTION ENGINEERING**  
**INDUSTRIAL ORGANIZATION AND MANAGEMENT II**  
**END OF SEMESTER II EXAMINATION**

**COURSE CODE: SEM 1212**

**CLASSES: MRUC/A/P/14J**

DATE: 23<sup>RD</sup> APRIL 2015  
TIME: 2 HOURS

**INSTRUCTIONS:**

**QUESTION ONE IS COMPULSORY**

**ATTEMPT ANY OTHER TWO QUESTIONS**

- 1.(a) State and explain **five** factors that influence plant location. (10 Marks)
- (b) List **five** objectives for layout planning. (5 Marks)
- (c) Explain **two** advantages and **three** disadvantages of process layout planning. (5 Marks)
- (d) List and explain any five principles of efficient material handling system. (10 Marks)
- 2.(a) State **four** forms of planned maintenance. (4 Marks)
- (i) Describe **four** advantages of planned maintenance. (4 Marks)
- (ii) Explain the term Centralized maintenance and give **two** advantages and **two** disadvantages of the System. (6 Marks)
- (b) With the aid of neat labeled sketch describe the bath tub curve. (6 Marks).

- 3.(a) Define the term Work Study. (2 Marks)
- (b) List **two** techniques used in work study. (2 Marks)
- (c) Explain **seven** steps (procedure) involved in carrying out Method Study. (7 Marks)
- (d) State **three** reasons/aims of work study. (6 Marks)
- (e) List any **three** advantages of standardization process. (3 Marks)
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- 4.(a )State **three** objectives of production planning and control. (3 Marks)
- (i) Describe the following types of production processes.
- Job production
  - Batch production
  - Mass production (6 Marks)
- (ii) List any **five** important elements in production planning and control. (5 Marks).
- (b) With the aid of neat labeled sketch describe the bath tub curve. (6 Marks).