



EAST AFRICAN SCHOOL OF AVIATION EXAMINATION

END - TERM I

ENGINEERING SECTION

EXAMINATION FOR THE AWARD OF DIPLOMA IN AERONAUTICAL ENGINEERING

SUBJECT: INDUSTRIAL ORGANIZATION AND MANAGEMENT

STREAM: TEP YEAR 3

Duration: 3 Hrs.

INSTRUCTIONS TO CANDIDATE:

1. *This paper consists of **THREE** (3) printed pages.*
2. *All questions carry equal marks.*
3. *Maximum marks for each part of a question are as shown*
4. *Attempt all **FIVE** questions.*
5. *Cheating will lead to exam cancellation.*
6. *You should have the following:-*
 - *Mathematical Tables*

- 1 (a) State SIX functions of organizational charts (6 marks)
- (b) Explain the following terms as used in organizational theory (6 marks)
- (i) Staff relationship
 - (ii) Delegation
 - (iii) matrix organization
- (c) (i) Explain the term “decentralization”
- (ii) Outline two advantages of decentralized organization over centralized organization (8 marks)
- 2 (a) State FIVE characteristics of batch production (5 marks)
- (b) Outline the differences between production planning and production control (6 marks)
- (c) Discuss factors affecting the plant layout (9 marks)
- 3 (a) Define “work study” (2 marks)
- (b) Explain the procedure of carrying out a method study (6 marks)
- (c) A project consists of 9 activities and the three time estimates are given below

Activities		Days		
i	j	To	TL	TP
10	20	5	12	17
10	30	8	10	13
10	40	9	11	12
20	30	5	8	9
20	50	9	11	13
40	60	14	18	22
30	70	21	25	30
60	70	8	13	17
60	80	14	17	21
70	80	6	9	12

Write the network for the above given project and find the projected completion time (12 marks)

- 4 (a) Differentiate between milestone charts and bar charts in project management (2 marks)
- (b) Explain the stages of production planning and control (10 marks)
- (c) Outline 8 symptoms of a plant layout which need to be redesigned for the advantage of production planning and control (8 marks)
- 5 (a) Outline six factors used to control a quality design (6 marks)
- (b) Explain the advantages of a good plant layout in an organization (6 marks)
- (c) Explain the advantages and limitations of process (functional layout) (8 marks)