



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations for 2015/2016

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

FIRST SEMESTER EXAMINATION FOR DIPLOMA IN CIVIL ENGINEERING

2707/304: CONSTRUCTION MANAGEMENT II, ESTIMATING AND COSTING II

Date:

Time:

INSTRUCTIONS:

- This paper consists of Eight Questions in Two Section; A and B
- Answer any Five questions choosing **THREE** questions from Section A and Two questions from Section B,
- All questions carry equal marks
- Maximum marks for each part of a question are as shown.

1. a) Explain the aim of work study in an organization. (2 marks)
 - b) List down four objectives of work study. (4 marks)
 - c) Define the terms methods study and work measurement. (4 marks)
 - d) The following data concerns the assembly of one electric switch;
 - Mean observed time for assembly 0.9 min
 - Performance rating 110%.
 - Personal allowance 7%.
 - a) Determine the standard time for the assembly of one switch.
 - b) The number of switches assembled in a shift of 8 hours. (10 marks)
2. a) Explain three remedies for breach of contract. (6 marks)
 - b) Outline three defences which a defendant may put out forward for an action of trespass on land. (6 marks)
 - c) Outline four ways of terminating a contract or offer. (8 marks)

Examination Irregularity is punishable by expulsion

3. a) Explain two forms of defamation and briefly explain two defenses and two remedies for defamation. (12 marks)
- b) Explain each of the following as applied in law;
- i) Vicarious liability
 - ii) Negligence
 - iii) Trespass
 - iv) Arbitration (8 marks)
4. a) Define the following as used in property ownership;
- i) Leases
 - ii) Mortgage
 - iii) Freehold (6 marks)
- b) List down five sources of law in Kenya. (5 marks)
- c) Outline four factors that make a contract null and void. (6 marks)
- d) State three circumstances under which a contract is discharged by frustration. (3 marks)
5. a) State four advantages of critical path method of planning over the Gantt chart. (4 marks)
- b) The table below shows the activities of a project:

Activity	Event	Duration (Weeks)
A	1-2	2
B	1-3	3
C	1-4	4
D	2-5	5
E	3-5	6
F	4-2	7
G	4-6	8
H	5-7	5
I	7-8	9
J	6-8	0
K	6-9	9

L	8-10	11
M	9-10	12

- i) Prepare an arrow network diagram.
- ii) Calculate the earliest starting time and latest starting time for each activity.
- iii) Show the critical path and project duration. (16 marks)