



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.

Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411

Fax: 064-30321

Website: www.must.ac.ke Email: info@must.ac.ke

University Examinations 2013/2014

THIRD YEAR, FIRST SEMESTER EXAMINATION FOR DIPLOMA IN CIVIL
ENGINEERING

ECV 0247: PROJECT MANAGEMENT II

DATE: APRIL 2014

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE – (30 MARKS)

- (i) Define the following terms:
 - (i) Resource leveling (2 Marks)
 - (ii) Resource allocation (1 Mark)
 - (iii) Project (1 Mark)
 - (iv) Project control (1 Mark)
 - (v) Scheduling (1 Mark)
- (ii) Explain the disadvantages of WBS. (4 Marks)
- (iii) Describe the advantages of resource leveling. (3 Marks)
- (iv) Explain the five characteristics of a project. (5 Marks)
- (v) Discuss the differences between CPM and PERT methods of scheduling. (6 Marks)
- (vi) Describe three uses of Gantt chart in scheduling. (3 Marks)
- (vii) List six ways through which construction claims arise. (3 Marks)

QUESTION TWO – (20 MARKS)

- (a) Define the following terms: (4 Marks)
 - (i) Total float
 - (ii) Independent float
 - (iii) Free float
 - (iv) Slack

- (b) Explain the advantages of arrow – on – arrow method. (5 Marks)
(c) Discuss the limitations of network analysis. (6 Marks)

QUESTION THREE – (15 MARKS)

- (a) Define the term WBS. (2 Marks)
(b) Discuss the importance of WBS in project work. (5 Marks)
(c) Discuss the guidelines to an effective work break down structure. (8 Marks)

QUESTION FOUR – (15 MARKS)

Given the following information

Activity	Preceding Activity	Duration
A	-	7
B	-	6
C	A, B	13
D	A,B	6
E	B	12
F	D,E	7
G	C,F	10
H	D,E	5
I	G, H	6

- (a) Draw the network diagram. (4 Marks)
(b) Determine the critical path and project duration. (3 Marks)
(c) For all non critical activities, calculate the following (8 Marks)
(i) Total float
(ii) Free float
(iii)Independent float
(iv)slack