



"Investing in Africa's Future"

**COLLEGE OF SOCIAL SCIENCES, THEOLOGY
HUMANITIES AND EDUCATION
DEPARTMENT OF EDUCATION**

**ELM620 PROJECTS AND FINANCE
END OF SECOND SEMESTER EXAMINATIONS**

MAY 2018

LECTURER: (E K NYATANGA)

DURATION: (3HRS)

INSTRUCTIONS

1. Answer any four (4) questions from the five questions.
 2. All questions have equal marks (25)
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QUESTION 1

Ten machines were assessed to find out the relationship between their ages and the cost of maintaining them. The data are shown below.

Age of Machine (X)	Maintenance Cost (Y)
5	190
10	240
15	250
20	300
30	310
30	335
30	300
50	300
50	350
60	395

$$b = \frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2}$$

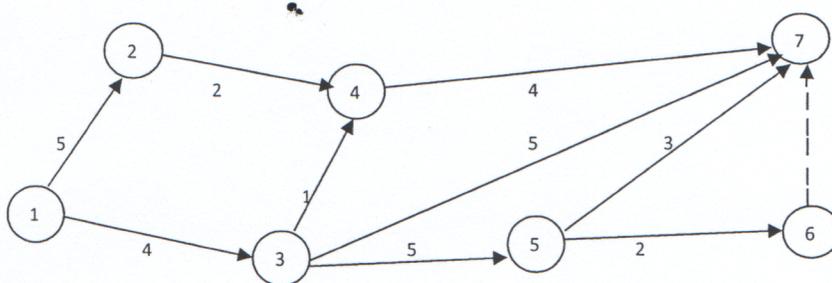
$$a = \frac{\sum Y - b\sum X}{n}$$

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- (a) Calculate the least squares regression line of cost on age. (20 Marks)
- (b) What is the estimated maintenance cost for a machine whose age is 40 months? (5 Marks)

QUESTION 2

The following network of a project gives the event numbers and activity times in weeks.



- a. Redraw the network and show the earliest and latest event times for all the events. (14 marks)
- b. Highlight the critical path. (4 marks)

- c. What is the expected project completion time? (4 marks)
- d. What is the term given to the activity shown in dotted line? (3 marks)

QUESTION 3

- a. Explain the difference between business risk and financial risk. (10 marks)
- b. Describe the factors that affect business risk. (15 marks)

QUESTION 4

Discuss at least five factors that should be considered when you as an entrepreneur are contemplating project identification. (25 marks)

QUESTION 5

In project implementation tendering and contracting are critical processes. Describe the content of 'an invitation to bid (ITB) document or advertisement. (25 marks)

END OF EXAMINATION QUESTION PAPER