

TRADE DIPLOMA IN ELECTRICAL ENGINEERING

FINAL EXAMINATION - SEMESTER 1, 2015

EEE585 ENGINEERING MANAGEMENT

Date: Friday, 24 April, 2015 Time: 2.00pm to 5.10 pm Room:

Instructions to candidates:

1. You are allowed 10 minutes Extra reading time during which you are NOT to write.
2. Begin each question on a fresh page and use both sides of the sheet.
3. Write your candidate – number at the top of each attached sheet.
4. Insert all written foolscaps, drawing paper, etc. in their correct sequence and secure with string.
5. For all sheets of paper on which rough/draft work has been done, cross it through and ATTACH to your answer scripts.
6. Write clearly the number(s) of the question(s) attempted on the top of each sheet.
7. There are six (6) questions altogether. ANSWER ALL QUESTIONS. the marks are indicated clearly for each question and for each part of the questions.
8. No programmable calculators are permitted into the examination room.

Question 1 (20 marks)

(a) Identify the levels of management in a traditional organisation and describe briefly three functions of each level.

(12 marks)

(b) Managing in the 21st century has evolved dramatically. Give a brief account of the trends that are most likely to impact the management work in future.

(8 marks)

Question 2 (16 marks)

(a) Identify the traditional constraints in engineering project management and describe each briefly.

(10 marks)

(b) A project involves eight (8) activities identified by the code letters given in table 2a below.

Table 2a identifies the work breakdown structure in sequence in which the activities must be undertaken. Construct a network for the project.

Activity	Code Letter of Any Immediately Preceding Activity or Activities
A	-
B	-
C	B
D	-
E	A
F	A, C, D
G	A, C, D
H	F, G

Table 2a.

(6 marks)

Question 3 (16 marks)

Model forms of contracts may be used by buyers and sellers as the basis for their contractual agreement.

- (a) Identify examples of model contract forms and outline where they are likely to be used.

(6 marks)

- (b) Explain **TWO** advantages and **TWO** disadvantages of the use of standard and model form contracts as the basis of a legally binding agreement between two organisations.

(10 marks)

Question 4 (16 marks)

- (a) Write a short account on **one** of the two integrating trend in modern management theory namely system approach and contingency approach.

(5 marks)

- (b) Identify and describe briefly the function of management.

(5 marks)

- (c) A senior staff wants to take a maternity leave because his wife is due to give birth in one month time of their first child. But the senior staff due to his seniority is supposed to prepare a brief of the financial part of the his government department's budgetary plan that should be with the Ministry of Finance in two weeks' time. Even then it is two weeks late.

What shall be your decision as his manager? Write notes to support the inclination of your decision.

(6 marks)

Question 5 (16 marks)

- (a) Managers are also called upon to be project managers. Give five skills required of a project manager.

(3 marks)

- (b) Give a brief account of a project budget and state how a project manager can keep track and control of the project cost and the validity of the S-curve.

(5 marks)

- (c) Earned value management system (EVMS) is very important in the management and measurement of success of engineering projects. Name and explain briefly the significance of the three pieces of information that are normally compared in EVMS.

(8 marks)

Question 6 (16 marks)

- (a) (i) Name the three types of planning and describe briefly the intensions and two basic elements that each type incorporates.
(ii) Comment on the statement that Cash Flow Statement is the most important part of a business financial planning.

(8 marks)

- (b) The closing prices of Company XYZ from April 23 to 27, 2014 were as in table 2 below.

Date	Closing Prices of XYZ (\$)
April 23	90.89
April 24	90.35
April 25	90.27
April 26	90.84
April 27	90.91

Calculate the moving averages and the weighted moving averages of the company XYZ in this 5 day period.

(8 marks)

The End