JARAMOGI OGINGA ODINGA UNIVERSITY

OF SCIENCE & TECHNOLOGY

UNIVERSITY EXAMINATIONS 2012/2013

2ND YEAR 1ST SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN INFORMATION TECHNOLOGY

(KISUMU L.CENTRE)

COURSE CODE: ICT 5215

COURSE TITLE: QUALITY MANAGEMENT PROCESS

DATE: 16/8/2013   **TIME: 9.00-12.00 NOON**

DURATION: 3 HOURS

INSTRUCTIONS

1. This paper consists of 5 Questions.
2. Answer Question 1 (Compulsory) and any other 2 questions.
3. Write your answers on the answer booklet provided.

Question one 20marks

a) What is Total Quality Management?   2mks
b) Name and explain **four** (4) main components of quality management.   4mks
c) Name and explain **nine** (9) TQM practices as identified by Cua, McKone, and Schroeder.
                                                                       9mks
d) What is Taguchi's Quality Loss Function.   2mks
e) In TQM, what is robust design?   2mks
f) Define benchmarking with regards to implementing continuous improvement?   1mk

Question Two 20marks

a) You are the head of QC in a company that manufacture ball-pens(e.g. Bic). Or consider a product you recently engaged in as part of your professional job.
    i. Briefly describe the product and its target market.   2mks
    ii. Name **five**(5) common definitions of quality.   5mks
    iii. For each definition, name two qualities.   5mks
b) What is the cost of quality with respect to question 1 above?
c) Mention **four** 4 types of costs.   4mks

  b) For each type, give an example.   4mks

Question three 20mark

a) Using W. Edwards Deming's "14 Points" principles for improving quality:-

    i).   Name the principle.   7mks

    ii).   Using a table, give a short description of the current state of affair and the improvement you would recommend using principle in i) as a guide.   7mks

2.   Name and explain steps in Deming wheel cycle.   4mks

3.   Explain the importance of employee empowerment in TQM.   2mks

Question Four 20marks

a) List **ten**(10) BPR success factors. Give a brief explanation of their relevance to Question B above.   10mks
b) List **ten**(10) BPR failure factors. Give a brief explanation of their relevance to Question B above.   10mks

Question five 20marks

a) What is quality audit?   2mks
b) What is quality assurance?   2mks
c) What is quality control?   2mks
d) Name **eight** (8) factors to consider when developing QA/QC system.   8mks
e) What is a text matrix? 2mks.
f) For Question B, come up a test matrix with 8 test cases.   4mks