

# JARAMOGI ODINGA OGINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF EDUCATION

# UNIVERSITY EXAMINATION FOR THE DEGREE OF MASTER OF EDUCATION IN

# PLANNING AND ECONOMICS OF EDUCATION

# $2^{ND}\;YEAR,\,2^{ND}\;SEMESTER,\,2017/2018\;ACADEMIC\;YEAR$

KISII CAMPUS, M.ED-SCHOOL BASED: DEC-2017

**COURSE CODE: EMA 840** 

**COURSE TITLE: RESEARCH METHODS II** 

DATE ...... STREAM: MED (PLN & ECON)

TIME: 2HOURS EXAM SESSION: December, 2017

# **Instructions:**

- 1 Answer question ANY THREE questions.
- 2 Candidates are advised not to write on the question paper.
- 3 Candidate must hand in their answer booklets to the invigilator while in the examination room.

# **QUESTION ONE**

a) Discuss the Salient features of the following general aspects of a thesis:

i) Synopsis (10mks) ii) Chapter five (5mks)

b) What is the purpose of literature review? To what extent should literature review be done?

(5mks)

#### **QUESTION TWO**

- a) You have been requested to give a key note address in an education forum on the theme "Writing a current thesis in the  $21^{st}$  century". With reference to **chapters one and three**, explain the main items of your maiden speech (10 mks).
- b) Select one of the problems you would wish to research on in curriculum studies and write on the following:
  - i) Four objectives of your study
  - ii) Hypotheses and / or research questions
  - iii) Four subsections of the literature review
  - iv) Research design
  - v) Significance of the study

(10mks)

# **QUESTION THREE**

According to the director of education in a given County, the mathematics mean score of the county was 50.64 in 2012. The chairman of the heads association in the said county believes that the mean is different today but is not sure whether it has increased or decreased due to proper staffing. The chairman obtains a simple random sample of 12 schools and finds that their mathematics mean performance is 65.014 and a standard deviation of 18.49. Conduct a hypothesis testing using the p-value approach at  $\alpha$ = 0.05 level of significance to substantiate the chairman's argument (20mks mks).

# **QUESTION FOUR**

A random sample data was summarized as follows:

Category of School attended	Students' academic	
	performance	
	Had < B+	Had ≥B+
Private school	31	469
Public school	185	1315

a) i) Why would it be necessary to use chi-square test in the analysis

(3mk)

- ii) State two mutually exclusive factors that would be analyzed in this question (2mk)
- b) Compute the chi-square value using the formula  $\chi^2_{o=} \sum \frac{(fo-fe)^2}{fe}$  at 0.05 level of significance and comment on the findings

(15mks)

# **QUESTION FIVE**

- a) The marks of 1000 candidates in an examination were normally distributed with a mean mark of 45% and standard deviation of 10%.
- i) Given that the pass mark in the test was 60%, estimate the number of candidates who passed the examination (5mks)
- ii) Calculate the probability that a student picked at random from the group scored between 35% and 65% (5mks)
- b)What is the usefulness of the mean and standard deviation indices in data analysis

(3mks)

- c) With respect to the multiple correlation and regression,
- i) When does a researcher use a multiple correlation and regression analysis (2mks)
- ii) State a typical multiple regression equation and explain the meaning of the indices therein

(3mks).

iii) What is the meaning of R and R<sup>2</sup>

(2mks)

#### **COURSE OUTLINE**

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

#### **KISII CAMPUS**

# SCHOOL BASED MASTERS PROGRAMME EDUCATIONAL ADMINISTRATION AND MANAGEMENT

# DEPARTMENT OF CURRICULUM & EDUCATIONAL MANAGEMENT

EMA 840: RESEARCH METHODS II/ PROPOSAL WRITING Y1S2

INSTRUCTOR: DR. MWEBI BENARD, PhD

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#### 1. Purpose of the course

The course aims at exposing students to writing concept papers, research proposals, thesis and various methods of analyzing quantitative and qualitative data.

# 2. Course Objectives

By the end of the course, the student should be able to:

- i) Discuss the features of a concept paper, proposal and thesis
- ii) Explain referencing according to APA Manual
- iii) Compute workings related to Quantitative data (analysis): parametric and non-parametric tests, descriptive and inferential statistics; the normal curve; Sampling theory-estimation and hypothesis testing; correlation and regression analysis, chi-square, ANOVA, MANOVA. Qualitative data analysis.
- iv) Write a concept paper, proposal and a thesis

# 3 Course Content

4 Choosing a study topic; description and discussion of the stage of thesis proposal and the thesis; referencing/ bibliographing/ footnoting in a thesis proposal and thesis research, methods applicable in educational administration, procedure and instruments, data processing and methods of data analysis - Quantitative and qualitative analysis.

# 5 Teaching Methodology

Lectures, tutorials and discussions, presentations.

# 6 Instructional Material/ Equipment

Writing materials, Whiteboards, handouts, projector and library research

#### 7 Course Assessment

Seminar presentations	20%
Assignment/sit in CAT	20%
Summative evaluation	60%

-(Grading shall be as detailed under the University examination regulations)

#### 8 Recommended Textbooks

Kothari, C.R.(2006). *Quantitative techniques*. New Delhi 110014, Vicas Publishing House, Pvt Ltd.

Mark, P.L. & Adrian, T.(2009). *Research Methods for Business Students*, London: Pearsons Educational Ltd.

Michael, Sullivan (2010). *Pearson's International Edition-Statistics Informal decisions using Data*, 3<sup>rd</sup> edition, London: Pearson Education Ltd.

Taro, Y.(1970). Statistics: An Introductory analysis, Newyork; Harper & Row Publisher Inc.

# **Textbooks for further Reading**

Christine, P.D. & Reidy, J.(2004). Statistics without Maths for Psychology.

Karmel, P.H& Polasek, M. (1986). *Applied Statistics for Economists*. New Delhi, Khosha Publishing House

Orodho, J.O. (2005). Elements of Education and Social Sciences: research Methods, 1<sup>st</sup> Edition, Nairobi: Masola Publishers