



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF SPATIAL PLANNING**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS IN**  
**SPATIAL PLANNING AND BACHELOR OF SCIENCE IN WATER RESOURCE AND**  
**ENVIRONMENTAL MANAGEMENT**  
**SEMESTER 2016/2017 ACADEMIC YEAR**

**CENTRE: MAIN CAMPUS**

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**COURSE CODE: PSP 3213**

**COURSE TITLE: RESEARCH METHODS IN PLANNING**

**EXAM VENUE:**

**STREAM: SPATIAL PLANNING**

**DATE:**

**EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer question 1 ( compulsory ) and ANY other 2 questions.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

Q1. (a) "Research is a process of steps used to collect and analyze information to increase our understanding of a topic or issue". Briefly discuss the statement highlighting the steps involved in a scientific research process. [10 Mks]

(b) Why is it important for a society to engage in research [4 Mks]

(c) The following terms are key in specifying a good research problem/question. Clearly explain the meaning of each of the terms.

(i) Concepts [1 Mk]

(ii) Variables/Indicators [1 Mk]

(iii) Objectives [1 Mk]

(iv) Hypothesis [1 Mk]

(d) Explain your understanding of a good research design. Is single research design suitable in all research studies? If not, why? [2 Mks]

(e) Identify and describe any **two probability sampling methods** [6 Mks]

(f) Outline any **four** (4) factors which must be considered when selecting a suitable data collection method [4 Mks]

Q2 (a) A clearly stated research question is important in a research process. Describe at least **four** characteristics of a good research question [8 Mks]

(b) Explain why it is important to do a proper Literature review for a research project [6 Mks]

(c) (i) Explain the meaning of the term "**theory**" in a research context. [2 Mks]

(ii) Why would it be necessary to use theory in a research? [2 Mks]

(d) Explain the concepts of **validity** and **reliability** in research [2 Mks]

Q3 (a) Identify and describe four ways/dimensions of classifying research types/designs giving examples in each case [8 Mks]

(b) Explain the difference between the following research designs

(i) Qualitative and Quantitative research [4 Mks]

(ii) Cross sectional and Longitudinal research [4 Mks]

(iii) Basic and Applied Research [4 Mks]

- Q4 (a) Identify and **describe** any **Two methods of collecting data**, showing the **advantages** and **disadvantages** of each method. [10 Mks]
- (b) (i) Why do researchers use samples to study their population? [2 Mks]
- (ii) Describe any **two types of Non Probability Sampling** procedures and explain when you may need to use them as well as the limitations you may have if you use them in your research [8 Mks]
- Q5. (a) What is the meaning of measurement in research? What difference does it make whether we measure in terms of nominal, ordinal, interval or ratio scale? Explain giving examples. [8 Mks]
- (b) (i) Describe any two methods you would use to analyse qualitative data collected during research [4 Mks]
- c) List any **FOUR** descriptive statistical techniques that can be used to summarize characteristics of quantitative data collected in a research study. [2 Mks]
- d) What **ethical elements** would you consider when planning for your research [6 Mks]