



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY**  
**SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR SCIENCE IN**  
**BIOLOGICAL SCIENCES**  
**3<sup>rd</sup> YEAR 2<sup>nd</sup> SEMESTER 2018/2019 ACADEMIC YEAR**  
**MAIN CAMPUS - REGULAR**

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<b>COURSE CODE:</b>	<b>SBI 3325</b>
<b>COURSE TITLE:</b>	<b>RESEARCH METHODS</b>
<b>EXAM VENUE:</b>	<b>BIO LAB</b> <b>STREAM (BIO)</b>
<b>DATE:</b>	<b>23/04/2019</b> <b>EXAM SESSION:12.00-2.00PM</b>

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**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer ALL questions in Section A and Any two questions in Section B**
  - 2. Candidates are advised not to write on question paper**
  - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
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**SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)**

1. Describe three factors that motivate the interest of conducting a scientific research (3 marks)
2. Justify why scientific research should be encouraged in Kenya (3 marks)
3. Describe three qualities of a good researcher (3 marks)
4. Outline three factors that influence response rate when using survey as a method of collection (3 marks)
5. Describe three data collections techniques involved in qualitative research (3 marks)
6. Differentiate between a cross-sectional and longitudinal study (3 marks)
7. Describe three qualities of a good research design (3 marks)
8. Describe three principles of a good experimental design (3 marks)
9. Give three reasons as to why the research process needs to be understood clearly (3 marks)
10. State three sources of research topics (3 marks)

**SECTION B: ESSAY QUESTIONS (40 MARKS)**

11. Explain the importance of sampling and the different types of sampling designs (20 marks)
12. Discuss six characteristics of a research mindset and eight problems likely to encountered while conducting a scientific research in Africa (20 marks)
13. Discuss the three types of research based on purpose (20 marks)
14. Highlight and describe major steps involved in the process of scientific research. (20 marks)