JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE \& TECHNOLOGY
SCHOOL OF BIOLOGICAL, PHYSICAL, MATHEMATICS AND ACTURIAL SCIENCES

## UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCES

$4^{\text {th }}$ YEAR $1^{\text {st }}$ SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS - REGULAR

| COURSE CODE: | SBB1421 |
| :--- | :--- |
| COURSE TITLE: | CONSERVATION \& UTILIZATION OF |
|  | BIOLOGICAL RESOURCES |
| EXAM VENUE: |  |
| DTREAM: (BSC) |  |
| DATE: $\quad$ SI2/2022 | EXAM SESSION: 15.00-17.00PM |
| TIME: 2 HOURS |  |

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

## SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. Briefly describe any four economic benefits of biodiversity (3marks)
2. State any three conservation strategies in Kenya
3. Outline the differences between conservation and preservation
4. State any threereasons for conserving biodiversity
5. Briefly describe any four threats to biodiversity today
6. Describe any three advantages of using stakeholder analysis
7. Describe the objectives of the Convention of Biological Diversity
8. Describe the differences between biopiracy and bioprospecting
9. State any three ways in which climate change may impact on biodiversity (3 marks)
10. Outline any three biodiversity related conventions

## SECTION B: ESSAY QUESTIONS (40 MARKS)

11. Discuss HIPPO
12. Discuss conservation areas in Kenya
13. Discuss the role of Kenya Wildlife Services Kenya’s biodiversity conservation
14. The table below provides species composition of two communities. Calculate the species diversity of each and state which of the two is more diverse

| Community | Species present |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
| A | 30 | 25 | 10 | 8 | 12 | 40 | 50 | 5 |  |
| B | 10 | 33 | 8 | 35 | 16 | 18 | 20 | 80 |  |

