

COURSE CODE: GEZO-01

GENERIC ELECTIVE COURSE SYLLABUS

Cell Type: Introduction, History and Origin, Basic Components of Prokaryotic and Eukaryotic Cells, Differences between Cells and Eukaryotic Cells, Summary, Glossary, Question and Answers, References

Structure and Types of DNA: Introduction, Structure of DNA, Chemical composition of DNA, Watson and Crick model DNA, Types of DNA, Function of DNA, Replication of DNA, Recombination of DNA

Cell Division: Introduction, Cell cycle, Mitosis, Meiosis, Comparison between mitosis and meiosis, Summary, Glossary, References, Terminal questions

Taxonomy and Systematic: Introduction, Introduction to taxonomy and its relationship with systematic, Importance and application of biosystematics, Summary, terminal questions

Zoological Nomenclature: Introduction, International Code of zoological Nomenclature, Summary, Self Assessment Question

Origin of life: Introduction, Special Creation Theory, Modern concept of origin of life, Summary, Self- assessment question, Terminal Questions

Ecological Concept: Introduction, Basic concept of ecology, Basic concept of habitat, Summary, Glossary, Self assessment question, References

The concept of Biodiversity, Conservation and Management: Introduction, Basic concept of Bio-diversity, Principal of wildlife, References

Environmental Pollution and Management: Introduction, Environmental pollution and management, Biodegradable and Non- biodegradable pollutants, Summary, Glossary, Self assessment question, References, Terminal questions

Overview of Immune System: Introduction, Importance of immunology, History and origin, Immune System, The structure of the Immune System, Innate Immunity, Adaptive Immunity, Passive resistance, Summary

Diversity of Microbes: Introduction, Basic introduction to Microbiology, summary, Glossary, Self Assessment questions, References

Principles and Uses of Analytical Instruments: Introduction, Principles and uses of analytical instruments, pH meter, UV-visible spectrophotometer