**THE PRESIDENT’S OFFICE-**

**REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT**

**SCHEME OF WORK**

TEACHER’S NAME:

SCHOOL’S NAME:

SUBJECT: **BIOLOGY**

CLASS/STREAM: **FORM THREE**

YEAR: **2025**

TERM: **1 & 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
| Group of organisms according to their similarities and differences. | Classify organisms in their respective kingdoms phylum/division and class. | **J**  **ANUARY** | 3  4 | **CLASSIFICATI-ON OF LIVING THINGS.** | **Kingdom plantae. DivisionCaniferoPhyla** | 4  4 | * Grouping   students to observe the collected plants.   * Leading of a class   discussion on general and distinctive features of the division canifero phyla.   * Leading a class   discussion on the structure of pine.   * Leading a class   discussion on the advantages and disadvantages of plants under division coniferophyla. | * Observing the   collected and displayed plants and record the observable features.   * Discussing   general and distinctive features of the division.   * Discussing the   structure of pine drawing and labelling it.   * Outlining   advantages and disadvantages of plants under division coniferophyla. | * A variety   of conifers   * Pictures of   conifers e.g. Pine, cypress, spruce, cedar.   * Cones   (fresh or preserved) | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** | Students should be able to explain general and distinctive features of division Canifero Phyla |  |
| Group of organisms according to their similarities and differences. | Classify organisms in their respective kingdoms phylum/division and class. |  | **5** |  | **division angiospermophyta (flowering plants)** | **4** | * Grouping   students and guiding them on observing variety of flowering plants.   * Leading a class   discussion on general and declarative features of division Angiospermophyta.   * Leading a class   discussion on the structure of representative of representative plants of class Monocotyledon and Dicotyledon. | * Students in   their groups to observe a variety of flowering plants and record their observable features.   * Discussing the   general and distinctive features of division Angiospermophyta.   * Discussing the   structure of representative plants of the two classes.   * Drew and label   the representative plants under each class. | * Flowers   from dicots and monocots.   * Fruits and   seeds of flowering plants.   * A variety   of flowering plants. | -//- | Students should be able to explain general and distinctive features of division Angiospermophyta. |  |
| Demonstrate approximate use of biological knowledge, concepts, principles and skills in evaluating the roles of various physiological processes in plants and animals. | Acquire basic knowledge, principles, concepts and skills in evaluating the roles of physiological processes in plants and animals. | **FEBRUARY** | 1 | MOVEMENT | Concept of Movement and Locomotion. | 4 | * Guiding   students to brainstorm on the meaning of movement and locomotion.   * Leading a class   discussion on differences between the two concepts.   * Organizing   students in groups to discuss the importance of movement in plants and animals.   * Design activity for   students to demonstrate movement and locomotion. | * Brainstorming   on meaning of movement and locomotion.   * Discuss the   differences between movement and locomotion.   * In groups to   discuss the importance of movement in plants and animals.   * In groups, to   perform various actions depicting movement and locomotion. | * Variety of   Organisms such as insects fish and mouse.   * Charts on   locomotion/movement of different organisms.   * Pictures/   drawings of various organisms depicting movement and locomotion. |  | Giving quiz to observe how accurate can the student explain the concepts of movement and locomotion.  Observing of the student can be able to demonstrate movement locomotion actions. |  |
|  |  |  |  |  |  |  | Guiding students through questions and answers to give differences between movement and locomotion. | Pointing the differences between movement and locomotion. | Variety of organisms such as insects, fish and mouse. |  |  |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  | F  EBRUARY | 2 | **MOVEMENT** | **Movement of the human body** | 2 | * Guiding students in   groups in examining the model of human skeleton. | * In groups,   examining the picture /model of human skeleton and identify its major parts. | * Model of   Human skeleton. |  | Students to identify the model of skeleton |  |
| **The Human skeletal system.** | 2 | * Leading a class   discussion on the structure of the human skeleton and its major components.   * Guiding students in   groups to discuss the adaptation of the major components of the human skeleton | * Discussing   structure of the human skeleton and draw a well labelled diagram of it.   * In groups   discuss the adaptations of the major components of the human skeleton. | * Diagram/   drawing of the major components of human skeleton. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** | Students to identify the stu=ructure of skeleton |  |
| -do- |  | **F**  **E**  **B**  **R**  **U**  **A**  **R**  **Y** | **3** | **MOVEMENT** | **Muscles and Movement** | 4 | * Organizing a   brainstorming session on machining of muscles   * Leading a class   discussion on types of muscles. | * Brainstorm on   meaning of muscles.   * Observing in   groups charts/models pictures of different muscles and identity their differences. | * Charts/diagrams/picture of different types of muscles. | Administer quiz to see the ability of a student to explain how muscles facilitate movement.  To check if the student is able to describe the structure of muscles by asking question. |  |
| * Design an activity   for students to demonstrate the role of muscles in movement.   * To lead a class   discussion on the structure of muscles. | * In pairs to   perform various actions depicting the role of muscles in movement.   * In groups to   observe/diagrams of muscles and discuss its structure.   * To draw and * label the structure of biceps, during bending and stretching of the arm. | * Charts/diagrams/photograph of muscles | -//- |
|  |  | **F**  **E**  **B**  **R**  **U**  **A**  **R**  **Y** | 4 |  | **Movement in plants.** | 1  2 | * To lead a class   discussion on the adaptations of different types of muscles to their roles.   * To guide students   in groups through questions and answer to discuss on causes, effects and preventive measures of muscles craps. | * In groups to   observe pictures/diagrams of different types of muscles and discuss their adaptations.   * In groups to   discuss causes, effects and preventive measures of muscles cramps | * Models/pictures/diagrams of muscles. |  | To check if a student is able to explain causes, effects and preventive measures of muscle cramps by giving a short test. |  |
| * To guide students   in observing plants showing movement in plants.   * To organize   students in groups and their discuss movement exhibited by plants and their importance.   * To make   clarification and conclusion on meaning and importance of movement exhibited by plants.   * Leading a class   discussion on the types of movement exhibited by plants. | * .observing   polled plants showing movement and record their findings.   * In groups to   discuss movement exhibited by plants and their importance and then present.   * To discuss in groups on the types of movement exhibited by plants. | * Photograph   diagrams and charts showing movement in plants.   * Plants   showing movement of curvature.   * A variety of plants showing movement exhibited by |  | To check if a students is able to explain the concept of movement by giving quiz.   * Observing   students in groups investigating movement in plants. |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  | **FEBRUARY** |  |  |  | 1 | * Provide guidelines   to students for performing experiments to investigate movement exhibited by plants   * To lead a class   discussion on findings, making clarifications and conclusion. | * Students in   groups by using guidelines to perform experiments to investigate movement exhibited by plants and record their findings.   * To presents their findings. | * plants. * Potted plants. |  |  |  |
| Demonstrate appropriate use of biological knowledge concepts, principles and skills in evaluating the role of various physiological processes in animals. | Acquire basic knowledge, principles, concepts, and skills in evaluating the role of physiological processes in animals. | **MARCH** | 1 | **COORDINATION** | Concept of coordination | 4 | * To guide students in group to discuss meaning and importance of coordination. * To make clarification and conclusion. * To guide students in observing charts/diagrams/pictures showing main components of nervous coordination. * To lead a class discussion on the ways in which coordination is brought about. | * To discuss in their groups meaning and importance of coordination and present their tasks. * To observe   charts/diagrams/pictures showing main components of nervous coordination and discuss the role of each components.   * In groups to   discuss the ways in which coordination is brought. | * Hot objects * Sharp object * Live specimen of insects and small mammals. * Game or puzzle charts on nervous coordination process. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** | To check if a student’s is able to:-   * Explain the concept of coordination in organisms. * Outline ways in which coordination is brought about by giving test. |  |
|  |  | **MARCH** | 2 |  | Nervous coordination in Human Neurones. | 2 | * To lead a class   discussion on the structures of motors, sensory and neurones.   * Organizing   students in groups and ask them to discuss on the roles of motor, sensory and relay neurones.   * To summarize   students responses, make general comments and necessary corrections. | * To discuss in   groups in structure of motor, sensory and relay neurons.   * To discuss on   the role of motor, sensory and relay neurons and present their tasks. | * Models/pict   ures/photographs of neurons   * Prepared   slides of neurones   * Microscope * A chart   showing summary of the roles of motor, sensory and relay neurones. |  | * To check if the student can:- * Describe the structure of motors, sensory and relay neurones.   Explain the role of motor sensory and relay neurones. |  |
|  |  | **MARCH** | **2** |  | Central Nervous System (CNS) | 2 | * To organize a brain   storming session on meaning of central nervous system (CNS).   * To summarize   students responses and give general comments and conclusion.   * To guide students   in groups to identify the components of the central nervous system and discuss their roles. | * Brainstorm on meaning of CNS * In group to   identify the components of the CNS and discuss their roles. | * Charts of   the Central Nervous System.   * Diagrams /   models of brain and spinal cord. |  | * To check if the   students able to give meaning of CNS, identify, components of the CNS and their functions by giving quiz. |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  |  |  |  |  |  | * To guide students in groups to observe models/diagrams of the spinal cord and brain and discuss their structure. | * To observe models/diagrams of brain and spinal cord, discuss their structures. * Draw and label the structure of brain and spinal cord. | * Models of brain and spinal cord. |  |  |  |
|  |  | **MARCH** | 3 | **COORDINATION** | Peripheral Nervous System (PNS) | 2 | * Organizing a   brainstorming session on meaning of PNS.   * To summarize,   make corrections and conclusion.   * To lead a class   discussion on components of PNS | * Give meaning * Discuss the components of PNS in groups. | * Photograph / charts showing the structure of PNS | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** | Asking oral questions to check if the student is able to give meaning of PNS & identify its components. |  |
| Reflex Action | 2 | * To design   Activities for students to demonstrate the reflex action.   * To lead students   to discuss the meaning of reflex action. | * Perform   Activities showing reflex actions.   * To discuss   meaning of reflex action. | * Hot objects * Live insects or small mammals. * Toys (snake, scorpion) | To check of the students is able to given meaning of reflex action by asking questions. |  |
|  |  | M  A  R  C  H |  |  | Reflex Action | 4 | * To display the charts/diagrams showing the neurotic pathway of a reflex action. * To lead a class discussion pathway of a reflex action. * To design activities for students to demonstrate simple reflex action and conditional actions. * To lead a class discussion on the differences between simple reflex action and conditioned reflex action. | * Observe and identify the components of neurotic pathway of reflex action. * To discuss the neurotic pathway of a reflex action. * In groups to demonstrate simple and conditional reflex actions and record their findings. * To discuss the differences between simple and conditional reflex actions. | * Charts/diagrams showing neurotic pathway of a reflex action. * Charts/drawings of simple conditional reflex actions. |  | To check of the students is able to given meaning of reflex action by asking questions. |  |
|  |  |  |  | **COORDINATION** | Sense Organs | 4 | * To guide students in groups to observe models/pictures/diagrams and brainstorm on meaning of sense organ, identify them and their related position. * Lead students to discuss in groups structure of each sense organ. * Leading a class discussion on the role of each sense organ and its adaptive features. | * Brainstorm on   of sense organ, identify them and state their relative position.   * Discuss in   groups structure of sense organ and draw and label the human ear, eye, nose tongue and s. Of the skin.   * Discussing role   of each sense organ and its adaptive features. | * Charts of different sense organs. * Charts/models/photographs of different sense organs. |  | Students to   * Explain meaning of sense organ. * Identify types of sense organs. * Describe structure of each sense organ . * State functions of sense organ by giving test. |  |
|  |  |  |  | **MIDTERM TEST 4TH WEEK OF MARCH TO 2ND WEEK OF APRIL** | | | | | |  |  |  |
|  |  |  |  | **MIDTERM BREAK 11ST APRIL -22ND PRIL 2025** | | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  | **APR**  **I**  **L** | 3 |  | Drug and drug abuse in Relation to Nevours Coordination. | 4 | * To lead students to discuss in * groups meaning of drug and drug abuse in relation to nervous coordination. | * In groups to discuss meaning of * drug and drug abuse in relation to nervous coordination. | * Simple drugs. |  |  |  |
| . | Apply appropriate skills in managing problems related drug/substance abuse |  | 4 |  | Drugs and Drug abuse in relation to nervous coordination. | 4 | * To invite heath   practitioner officer to talk on drug addiction, its causes and effects.   * To guide students   to clarify major issues and make conclusion.   * Organize students   in groups and discuss on preventive and control measures of drug abuse.   * Use students   correspondence and make clarification. | * To summarize   major points from the guest speaker presentation.   * Prepare project   on cases of drug addiction in their surrounding community.   * Discuss in   groups on preventive and control measures of drug abuse. | * Brounchure and fliers on causes and effects of drug abuse. * Posters of drug addicts or users. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** |  |  |
| 5 | Hormonal Coordination | 4 | * To lead a class   discussion on the location of the endocrine glands in the mammalian body and types of hormones produced by each gland | * To draw the   diagram to show location of endocrine glands in human body. | * Charts/diagr   ams of endocrine glands and hormones produced by each gland. |  |  |
| Demonstrate appropriate use of biological knowledge, concepts, principles and skills in evaluating the role of various physiological activities in plants and animals. | Acquire basic knowledge principles, concepts and skills in evaluating the role of physiological processes in plants and animals. | **MAY** | 1 | COORDINATION | Hormonal Endocrine Coordination | 2 | * Land a class   discussion on the:   * Difference   between endocrine and exocrine glands.   * Role of each   hormone in the mammalian body.   * Disorders of   hormonal coordination due to hyper and hypo-secretion on insulin, GH, ADH and throxine. | * Discuss the   difference between endocrine and exocrine glands.   * Role of each   hormone in mammalian body   * Disorders of   hormonal coordination due to hyper- and hypo- secretion of mentioned hormones. | * Pictures/photographs of disorders of hormal coordination. Eg. Goitre gigantism and dwarfisim. |  |  |  |
| 1 | Coordination in plants. Concepts of  Topic Nastic responses | 2 | * Guide students   to observe potted plants in all round light and unilateral light and record their observations.   * To guide students   to give meaning of topic and nastic responses through questions and answers | * Observe plants   and records observations.   * Give meaning of   topic and nastic Reponses. | * Potted plants. * Mimos plant * Charts/photographs or pictures of topic responses. |  |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  | **MAY** | **2** | **COORDINATION** | **Coordination in plants** | 2 | * Provide students   with guidelines for practical activity on the effects of topic and nastic plants.   * To guide students   in discussing on the importance of hydro-geo-photo and chemo- tropisms in plants.   * To lead   discussion, make general and conclusion on the significance of tropisms and nastic responses in plants. | * Using guidelines   to carry out experiments to investigate the effects of tropic and nastic in plants and record their findings.   * To discuss on   groups the importance of hydro –geo-photo and chemo-tropism in plants.   * To outline   significance of tropism in plants. | * Potted plants subjects to all round –light and unidirectional light. * Charts to show examples of tropic responses. * Mimosa plant. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** |  |  |
|  | 2 | **EXCRETION** | **Concept of excretion** | 2 | * Brainstorm * Organize a brainstorming session on meaning of excretion * To lead students to name excretory. | * To brainstorm on meaning of excretion. | * Models of kidney. * Diagram / charts of excretory system. |  |  |  |
| Demonstrate appropriate use of biological knowledge, concepts, principles and skills in evaluating the roles of various processes in plants and animals. | Acquire basic knowledge principles, concepts and skills in evaluating the role of physiological processes in plants and animals. |  |  | **E X C R E T I O N** | **Excretion In Human** | 2 | * To lead students to discuss on the types on the types of excretory organs in human. * To dissect any small mammal and display the urinary system. * To lead students to discuss the structure of the urinary system and its adaptive features. * To organize students in groups and brainstorm on the process of urine formation. * To make clarification. | * To discuss the types of excretory organs in human. * To observe the urinary system and identify the structures. * To discuss and draw the structure of human urinary system. * To discuss the process of urine formation in groups. | * Dissecting kit. * Chloroform * Cotton * Models/charts pictures showing human urinary system. |  |  |  |
|  |  |  | 3 | **EXCRETION** | **Complication and disorder of excretory sysem.** | 2 | * To prepare a case study on common disorders of the excretory system. * To lead students in groups discuss on causes, symptoms, effects and control measures of disorders and complications of the excretory system. | * To discuss on the case study. * In groups to discuss of causes, symptoms, effects and control measures of disorders and complications the excretory system. | * Charts/diagrams of the urinary system and associated disorders and complications. * Charts/models/pictures showing urinary system. | Human biology  Zambak Publishers. |  |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  |  |  |  | **Excretion in plants.** | 4 | * To lead students through question and answers to mention ways by which plants get rid of excretory products and give examples . * To make general comment and conclusion on different types of excretory products eliminated by plants. * To lead students   in groups to discuss the importance of excretory products of plant. | * To summarize major points and list down types of excretory products eliminated by plants. * To discuss in groups on the importance of excretory products of plants. | * Sample of plant excretory products such as gum, latex alkaloids. * A chart showing various plants and their waste products. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** |  |  |
| **TERMINAL EXAMINATIONS 4TH WEEK OF MAY TO 1ST WEEK OF JUNE** | | | | | | | | | | | | |
| **TERMINAL LEAVE 06TH JUNE TO 08TH JULY 2025** | | | | | | | | | | | | |
|  |  | JULY | 4 | **REGULATION** | **Concept of Regulation** | 2 | * To guide students   in groups to discuss the meaning of regulation and its importance.   * To lead a plenary   discussion and make clarification and conclusion of the concept of regulation and its importance.   * To lead a class   discussion on the types of regulations; temperature regulation, regulation of water and mineral salts in animals. | * To discuss the meaning of regulation and its importance. * To discuss groups on the types of regulation. | * A chart showing the process of regulation in animals. * Charts /pictures /diagrams showing various types of regulation. |  |  |  |
|  |  | **AUGUS**  **T** | 1 | **R E G U L A T I O N** | **Temperature Regulation in Animals.** | 4 | * Guide students in   group to perform experiments to determine the temperature of a frog and a small mammal under different conditions.   * Clear   misconceptions and make conclusion.   * To lead a class   discussion on the temperature regulation in mammals.   * To lead a class   discussion on the structure of the skin in relation to temperature regulation (vasoconstriction and Vasodilation) | * In groups to   determine the temperature of a frog and a small mammal, under different conditions and record their findings.   * Divide the   experimental animals into two groups; ectoderms and endodermis.   * In pairs, carry   out practical exercise on measuring body temperature before and after performing exercise and report that findings.   * To discuss in   groups the body reactions when temperature of the surrounding is lower and when is higher than body temperature.   * Draw and label   section of the skin showing vasoconstriction and vasodilation. | * Toad /Frog * Small   mammal (rat, mouse, rabbit\_   * A clinical thermometer. * A chart   showing a table for recording body temperature.   * Pictures/diagr   ams showing the reaction of the skin under different conditions (hot and cold) | Fundamentals of Biology Book 3  (J.M. Mwanki  (G.G.  Geoffrey) |  |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  | AUGUS  T | 2 | **R E G U L A T I O N** | **Osmoregulation in mammals** | 4 | * Lead students in   groups to discuss on meaning of osmoregulation and its importance.   * To make   Clarification and conclusion on meaning and importance.   * To guide students   through question and answer to mention factors which may affect the contents of salt and water in the body.   * To guide students   in groups to categorize factors which may salt and water content. | * Discuss the meaning and importance of osmoregulation. * To mention the factors which may affect the contents of salt and water in the body. * Present their task and categorize the factors. | * Charts/   pictures photographs or diagrams showing osmoregultion in mammals.   * Models/   Charts/  pictures showing the structure of a nephron. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** |  |  |
| **A**  **U**  **G**  **U**  **S**  **T** | 3 |  | **Blood Sugar regulation in mammals** | 4 | * Lead students to   discuss on how hormones regulate sugar level in the blood (insulin and glucagon.   * To guide   students summarize major ideas and make conclusion on the mechanism of regulation sugar level. | * To discuss in groups how hormones regulate sugar level in the blood and present their task. | * Pictures /charts photographs showing mechanisms of regulation sugar level in the blood. |  |  |
|  |  |  | 4 |  | **Blood sugar regulation** | 4 | * To assign tasks to   students in group to read literatures and outlines the causes, symptoms and effects of high and low sugar level in the blood.   * To guide students   to summarize major ideas and make conclusion on the mechanisms of regulating sugar level in the blood. | * Students to read   on literature and outlines the causes, symptoms and effects of high and low sugar level in the blood and present their tasks. | Pictures /charts photographs showing mechanisms of regulation sugar level in the blood. |  |  |  |
|  |  |  |  | **MIDTERM TEST 4TH WEEK OF AUGUST TO 2ND WEEK OF SEPT** | | | | | | |  |  |
|  |  |  |  | **MIDTERM BREAK 29TH AUGOST – 15TH SEPTEMBER 2025** | | | | | | |  |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
| Demonstrate,  appropriate use of biological knowledge, concepts, principles and skills in evaluating the role of various physiological processes in plants and animals. | Acquire basic  knowledge, principle and skills in evaluating the role of physiological processes in plants and animals. | S  EPT  EMBER  **OCTOBER** | 4  1 | **REPRODU-**  **CTION** | Concept of  reproduction | 2 | * To guide students   to discuss the meaning and importance of reproduction.   * To summarize   students responses and make necessary clarification.   * To observe a   variety of organism which reproduce by seeds or vegetable.   * To lead a plenary   discussion, make general comments and conclusion. | * To discuss the   meaning and importance of reproduction.   * To observe a   variety of organisms displayed and discuss in groups the ways in which the plants reproduce by asexual or sexual reproduction.   * To discuss in   groups the difference between asexual and sexual reproduction and present their group task. | * Flip charts * V.I.P.P cards carrying key message on reproduction * Variety of organism. | **SCSU &**  **MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** |  |  |
| **Meiosis and Reproduction** | 2 | * To guide students   to brainstorm the meaning of meiosis using charts/photograph and models showing stages of meiosis.   * To summarize   students responses and make conclusion.   * To lead a class   discussion on the significance of meiosis in relation to reproduction. | * To brainstorm the   meaning of meiosis.   * To discuss on the   significance of meiosis in relation to reproduction. | * Charts/photographs showing stages of meiosis. * Models showing stages of meiosis. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** |  |  |
|  |  |  | 1 |  |  | 2 | * To display charts/photographs/diagrams showing the events taking place in each stage of meiosis process. * To lead a plenary discussion and make reflection on students responses to summarize major idea. | * To observe the events taking place in meiosis and outline them. * Present for class discuss. | * Prepare microscope slide on stages of meiosis * Microscope * Charts/   photographs models showing stages of meiosis. |  |  |
|  |  |  | 2 |  | **Reproductive in flowering plants.**  **The structure of the flower.** | 4 | * To provide   guidelines to students for collecting various types of flowers.   * To lead a plenary   discussion and make clarification and conclusion on the structure of a flower.   * Lead students to   identify and discuss reproductive parts of flowers. | * To observe the   collected flowers and identify different parts of the flower and describe their structures.   * To draw a well labelled diagram of the named flower. * To identify and discuss reproductive parts of a flower. | * Variety of flowers. * Charts/models/photographs of flowers. |  |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  | **O C T O B E R**  **OCTOBER** | 3 | **R E P R O D U C T I O N** | **Reproduction in mammals** | 2 | * To guide students   to identify male and female reproductive organs from the dissected mice.   * To lead a class   discussion and make correction and clarification on the structures of male and female reproductive systems. | * In groups to   identify in male and female reproductive organs from the dissected mice.   * To discuss on the   structure of male and female reproductive systems and draw the diagrams. | * Mouse/any other small mammal * Dissecting kit. * Tray / dissecting board * Chloroform * Cotton wool * Water. |  |  |  |
| 3 | **Gamete formation and fertilization** | 2 | * To lead a plenary   discussion on gamete formation, liberation and meaning of gamete.   * To guide students   to identify the phases of menstrual cycle and events that take place in each phase.   * To guide students   to discuss the process of fertilization pregnancy and child birth. | * To discuss in groups the process of gamete formation in mammals and liberation. * To identify the phase of menstrual cycle and events that take place. * Discuss on the   process of ovulation and hormones involved in the process.   * To discuss in groups the process of fertilization pregnancy and child birth. | * Pictures   showing formational liberation of gametes.   * Charts on   fertilization process. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar**  -//- |  |
| Use appropriate skills to solve various health related problems. | Take appropriate precaution and measures against problems. Related to reproductive processes in plants and animals. |  | 4 |  | **Multiple Pregnancies.** | 4 | * To lead as in   groups to discuss factors affecting fertilization.   * To lead students   to discuss on meaning and importance of artificial insemination.   * To guide students   to summarize the major responses and make general comments. | * To discuss in   groups the factors affecting fertilization and present their tasks.   * Discuss on meaning and importance of artificial insemination, and present their tasks. | * Charts/drawing depicting artificial insemination. |  |  |
|  | Take appropriate precautions and measures against problems related to  reproductive processes in animals | **NOVEMBER** | 1 |  | **Disorders of Reproductive system.** | 2 | * To lead students   to discuss on meaning and causes of multiple pregnancies.   * To lead a class   discussion and summarize the major points on differences between identical and fraternal twins.   * Lead students in   groups and discuss on types of disorders of the human reproductive system. | * To discuss of   meaning and causes of multiple pregnancies.   * Discuss on   differences between identical and fraternal twins.   * To discuss in   group different types of disorders of the human reproductive system. | * Charts/   pictures on multiple pregnancies.   * Charts   /diagrams or pictures or pictures showing identical and fraternal twins   * Document   on disorders of the human reproductive system.. |  |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  | **N**  **O**  **V**  **R**  **M**  **B**  **E**  **R** | 1 |  |  | 2 | * Guiding students   in groups with questions to discuss on causes and effects of the reproductive system disorders.   * To lead a class   discussion on the possible remedies of reproductive system disorders. | * To discuss on   causes and effects of the reproductive system disorders.   * To discuss   possible remedies of the reproductive system disorders. | * Documents   on the disorders of the human reproductive system. |  | Students to explain  causes and effects of the reproductive system disorders.  And possible remedies of the reproductive system disorders. |  |
| -do- | **Complications of the Reproductive system.** | 4 | * To guide students   to brainstorm on the types of complications of the reproductive systems.   * To summarize the   major points on the meaning of aborting, still birth, miscarriage and ectopic pregnancy.   * Lead students to   discuss on causes and effects of complications of reproductive system.   * To make   clarification and conclusion.   * To guide students   to discuss in groups ways of minimizing complications and disorders of the reproductive system. | * To brainstorm on the types of complications of the reproductive system. * To discuss on causes , effects of complications of reproductive system. * To discuss ways of minimizing complications and disorders of the reproductive system. | * Video, tapes * Text on case studies on complications of the reproductive system. * Video tapes/charts pictures photographs showing complications of the female reproductive system. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** |  |
| 2 |
|  |  | **NOVEMB**  **ERER** | 3 | **R E P R O D U C T I O N** | **Sexuality and sexual Health and Responsible sexual behaviour.** | 4 | * Guide students to   discuss meaning of sexuality sexual health and sexual behaviour.   * Guide students in   groups to discuss on factors influencing sexual behaviour in different groups of people.   * Guide students to   discuss responsible and irresponsible sexual behaviour and their impacts on one self, family and community.   * To guide students   to summarize outline ways of eradication irresponsible sexual behaviour in the family, school and community.   * To lead plenary   discussion and make clarifications on appropriate life skills required to cope with adolescent sexuality and sexual behaviour such as self esteem, problems solving and decision making. | * Discuss on   meaning of the sexuality, sexual health and sexual behaviour.   * Discuss in   groups on factors influencing sexual behaviour in different groups of people.   * To discuss the   responsible and irresponsible sexual behaviour and their impacts.   * Tabulate   differences between responsible and irresponsible sexual behaviour.   * Discuss the   ways of eradicating irresponsible sexual behaviour.   * Discuss on   appropriate life skills required to cope with adolescent sexuality and sexual behaviour. | * Pictures, charts and photographs, video tapes depicting cases of sexuality and sexual behaviours. * Radio/video tapes pictures/ charts showing people with different sexual behaviours |  |  |  |
| **COMPETENCE** | **GENERAL OBJECTIVES** | **MONTH** | **WEEK** | **MAIN TOPIC** | **SUB-TOPIC** | **PERIODS** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L MATERIAS** | **REFERENCE** | **ASSESSMENT** | **REMARKS** |
|  |  | NOVEMBER  NOVEMBER | 4  4 |  | Family planning and contraception | 2 | * To lead student to   discuss on the concepts of family planning and contraception.   * Organize students   in groups and discuss of various family planning and contraception methods their advantages and disadvantages   * Importance of   family planning and contraception. | * To discuss on   the concepts of family planning and contraception.   * To discuss of   various family planning methods and contraception, their advantages and disadvantages.   * Importance of   family planning contraception. | * Various   family planning devices.   * Charts/   pictures photographs of family planning devices. | **SCSU &MoEVT**  **(2012), Biology for secondary schools form 3, Uhuru media, Zanzibar** |  |  |
| **Maternal and child care.** | 2 | * Lead students to discuss on maternal and child care. * Assign students to investigate socio-cultural factors which affect maternal and child care. * To lead a class discussion on the ways of providing appropriate maternal and child care for PLWHA | * To discuss importance of maternal and child care. * Present their investigations for class discussion. * To discuss on ways of providing appropriate maternal and child care for PLWHA | * Charts/ pictures and photographs of women and children living with HIV/AIDS | -//- |  |
|  | ANNUAL EXAMINATION 4TH WEEK OF NOV TO 1ST WEEK OF DEC  ANNUAL HOLIDAY 05TH DEC 2025 | | | | | |  |