KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

ANNUAL TEACHING PLANS

GRADES: 10, 11 and 12

LIFE SCIENCES

JANUARY 2026

Life Sciences - Grade 10 – CAPS (2026)

Annual Teaching Plan - TERM ONE (11 weeks) - 53 DAYS (14 Jan – 27 March)

Week Number (Week Ending)	Completion Date	Topic for the week	INFORMAL ASSESSMENT		% Curriculum Coverage	SMT Signature and Date	FORMAL ASSESSMENT - SBA
			TASK/ACTIVITY	TICK			
Week 1 **3 days** **(16/01)**		**Orientation to Life Sciences**: (Pre-Knowledge - **SCIENTIFIC SKILLS LINKED TO GRADE 9**) • How science works based on knowledge and scientific skills, careers and subject combinations Graphs, Calculations: Percentage, Percentage increase/ decrease, Average **Scientific method**: • Planning steps, identification of variables, ensuring validity and reliability. **Brief overview of the history of microscopy**: • Light and Electron microscope • **Scientific diagrams** • **Calculations:** Actual size, Magnification	**Activity** Draw, line graph, bar graph, histogram and pie charts **Activity** Interpretation of graphs, identify trends/ relationships between variables. **Activity** Identification of variables **Activity** Differentiate between the planning and conducting steps of the investigation. **Activity** Explain and demonstrate how a light microscope works using a diagram with labels and functions **Activity** Explain and demonstrate how a light microscope works using a diagram with labels and functions **INFORMAL TEST: Life sciences** Skills and Investigations	☐ ☐ ☐ ☐ ☐ ☐	**7%**		**Task 1: Practical** (Minimum 30 marks) Term Weighting – 25% **Task 2:** **March Controlled Test** (1,5 hours- Minimum 75 marks) Term weighting – 75%

Week 2 **5 days** **(23/01)**		The Chemistry of Life (Pre-Knowledge - **MOLECULES FROM NATURAL SCIENCES GRADES 8 AND 9**) **Molecules for life:** **Organic molecules** • made up of C, H, O and N, P. • Cells are made up of proteins, carbohydrates, lipids, nucleic acids and vitamins. (Only basic structural detail required) **Inorganic compounds** • Water: 2H and 1O • Minerals: e.g. Na, K, Ca, P, Fe, I, nitrates, phosphates. Macro and micro elements. • Main functions and deficiency diseases **Organic compounds** • **Carbohydrates**- Monosaccharides (single sugars) e.g. glucose, fructose; disaccharides (double sugars) e.g. sucrose, maltose; polysaccharides (many sugars) e.g. starch, cellulose, glycogen **INVESTIGATIONS: Food tests for glucose and starch**	**Activity** **Table** – minerals **Activity** Construct/ draw models of water using coloured paper, and functions of water and the role of fertilisers in eutrophication. **Activity Construct**/ draw models of simple and more complex molecules (organic compounds) using coloured paper. (Learners need to know only basic structural details.) **Activity State** building units (monomers) and functions of **carbohydrates and lipids.** Draw a table of glucose and starch food tests showing colour changes	☐ ☐ ☐ ☐	**21%**		

Week 3 **5 days** **(30/01)**		Organic compounds • **Lipids** (fats and oils)-1glycerol and 3 fatty acids; unsaturated and saturated fats. Cholesterol in foods. Heart disease • **Protein** – amino-acids (C, H, O and N and some have P, S, Fe). Proteins are sensitive to temperature and pH; loss of structure and function. • Role of enzymes in breaking down/synthesizing molecules • Influence of temperature and pH on enzyme action • Lock and key model of how enzymes work • Enzymes in everyday life, e.g., washing powders. • **Nucleic acids**: DNA and RNA – Consisting of C, H, O, N and P (No details of structure required). • **Vitamins** e.g. A, one of B vitamins, C, D and E **INVESTIGATION Food** test for lipids **INVESTIGATION** To test the working of a "biological" **washing powder** with enzymes. **OR** Hydrogen Peroxide and **chicken liver** to demonstrate effect of enzyme. **OR** Fresh pineapple juice, **egg white** in plastic drinking straw. Observe, measure and record the results of the above experiment done at different temperatures	**Activity** State the building units (monomers) and functions of proteins. **Activity** Using data and interpreting graphs showing the influence of temperature and pH on enzyme action. Diagram explaining the lock- and key model **Activity** Tabulate the different vitamins, their functions, source and deficiency diseases. **Activity** Compare Recommended Daily Allowance (RDA) with usual diet of individual learners for one week. Draw a pie chart of the food types listed in learners' diet and discuss implications of the usual diet of learners. **INFORMAL TEST: Chemistry of Life**	☐ ☐ ☐ ☐ ☐ ☐	**34%**		

Week 4 **5 days** **(06/02)**		➢ Microscopy and microscopic skills **Cells: The Basic Unit of Life** (Pre-Knowledge - **CELL STRUCTURE FROM GRADE 9)** **Cell structure** • Molecular make-up: • Cells are mostly made of proteins, carbohydrates, lipids, nucleic acids and water **Cell structure and function: roles of organelles** • Cell wall-support structure in plant cells only. • Cell membrane- boundaries and transport, movement across membranes: diffusion, osmosis and active transport **INVESTIGATION** Use a microscope or micrographs to observe and draw the structure of a: plant cell (**wet mount** of **onion epidermis**), and animal cell (**cheek cells)**	**Activity** Calculate magnification of drawing by measuring the field of view under a microscope **OR** Calculate the size of specimen on a micrograph using the scale line provided. **Activity** Explain and demonstrate how a light microscope works using a diagram with labels and functions	☐	**47%**		
Week 5 **5 days** **(13/02)**		**Cell structure and function: Roles of organelles** • **Nucleus**, chromatin material, nuclear membrane, nucleopores, nucleolus, the control centre, heredity. • Differences between prokaryotes and eukaryotes • **Cytoplasm**-storage, circulation of materials • **Mitochondria**-release of energy during cell respiration. • **Ribosomes**-protein synthesis • **Endoplasmic reticulum** (rough and smooth) transport systems • **Golgi body**-assemble secretion	**Activity** **Make** labelled drawings of plant and animal cell. State the functions of the various cell components **Activity** **Tabulate** the different organelles indicating the location, structure (diagrams), and function.	☐ ☐ ☐	**60%**		

Week 6 **5 days** **(20/02)**		**Cell structure and function: roles of organelles** • Plastids: production and storage of food pigments • Vacuole, lysosomes, vesicles-storage, digestion, osmoregulation. • Relate structure and location of organelles to their functions. • Cells differ in size, shape and structure in order to carry out specialized functions *(link to tissues)* • Differences between plant and animal cells **INVESTIGATION** Investigate diffusion and osmosis	**Activity** **Compare** the structure of plant and animal cells by using any visible example (e.g., a model, diagrams or poster including organelles). **Activity** Draw a table to indicate the differences between these cells **INFORMAL TEST: Cells: Basic Unit of Life**	☐ ☐	**73%**		
Week 7 **5 days** **(27/02)**		**Chromosomes:** • in nuclei of all cells, two chromatids, centromere **Cell Division: Mitosis** **The Cell cycle including mitosis**: • Interphase, mitosis (with names of phases) cytokinesis, growth **Role of mitosis**: • growth and repair. Reproduction in some simple organisms Continuous **process of mitosis**: • the division of a cell to form two identical cells (*Simple description with diagrams to show chromosome changes so that one parent cell forms **two identical** daughter cells)* • Difference in telophase between plant and animal cells	**Activity** Describe the events of the various phases of mitosis Make a labelled drawing of selected phases of mitosis **Activity** **Interpret** the phases and events of mitosis from given diagrams **Activity** Use micrographs to observe and draw the different phases with descriptions of each phase. **Activity** Indicate the difference in telophase between plant and animal cells. **INFORMAL TEST: Cell Division: Mitosis**	☐ ☐ ☐	**86%**		

Week 8 **5 days** **(06/03)**		**Cancer: (Only a brief description required)** • Uncontrolled cell division and growth • Causes of cancer, Treatments of cancer • Medical biotechnology e.g., radiotherapy, chemotherapy (no detail required)	**Activity** Research and Present information on ONE of the cancers. This must include causes, prevalence and treatment.		**100%**		
Week 9 **5 days** **(13/03)**		**Revision and Assessment**	**Activities for Revision and Assessment**				
Week 10 **4 days** **(20/03)**		**Assessment**					
Week 11 **5 days** **(27/03)** **END OF TERM ONE**		**Assessment**					

Life Sciences - Grade 10 – CAPS (2026)

Annual Teaching Plan - TERM TWO (12 weeks) - 54 DAYS (08 April – 26 June)

Week Number (Week Ending)	Completion Date	Topic for the week	INFORMAL ASSESSMENT		% Curriculum Coverage	SMT Signature and Date	FORMAL ASSESSMENT - SBA
			TASK/ACTIVITY	TICK			
Week 1 **3 days (10/04)**		**(CAPS p 26) Plant Tissues** (Pre-knowledge: **Plant Tissues, organelles, Movement across membranes)** • Introduce concept of a **tissue** as a group of similar cells adapted for a particular function: • cell **differentiation** • **Plant tissues** Emphasis on the relationship between basic structure and function. **Differentiate between meristematic and permanent tissue** **Permanent tissue:** • epidermis (root hair, guard cells) • parenchyma • collenchyma • sclerenchyma • vascular tissue: xylem & • phloem	**Activity** Examine and identify the following plant tissues: epidermis (root hair, guard cells) parenchyma, collenchyma and sclerenchyma using micrographs or posters. **Activity** Tabulate the different tissues by drawing the tissue to show specialised structure and functions	☐ ☐	**10%**		**Task 3: Assignment** (Minimum 50 marks) Term Weighting – 25% Year Weighting – 20% **Task 4:** **June exam** (2,5 hours – 150 marks) Term weighting – 75% Year weighting – 20%

Week 2 **5 days** **(17/04)**		(CAPS p28) Plant Organs • Anatomy of dicotyledonous plants: root and stem: • distribution of different tissues structure of cells in different tissues (link to plant tissues) Organs consist of a number of tissues e.g., leaf structure. **Leaf structure:** • Cross section of a dicotyledonous leaf to demonstrate and • explain its structure in terms of its functions i.e., photosynthesis, gas exchange and transport. • Link with plant tissues, appropriate cell organelles, • movement across membranes and movement of molecules into, through and out of the leaf.	**Activity** Draw cross sections of root and stem (line diagram) **INFORMAL TEST:** **Plant Tissues, organelles, Movement across membranes** **Activity** Observe and draw a section of a dicotyledonous leaf. Labels and functions. **Options**: use prepared slides of cross section of a leaf or use micrographs.	☐ ☐ ☐	**22%**		
Week 3 **5 days** **(24/04)**		**(CAPS p 29)** **Support and Transport systems in Plants** **Transpiration** • Relationship between water loss and leaf structure • Factors that affect the rate of transpiration: temperature, light intensity, wind and humidity **INVESTIGATION** Design investigations to discover the effect of temperature, light intensity and humidity on transpiration rate (using a simple potometer).	**Activity** Relationship between water loss and leaf structure **Activity** How to conduct a scientific investigation following the different steps. **INFORMAL TEST:** **Diffusion and Osmosis, Plant Tissues**	☐ ☐	**32%**		

Week 4 **3 days** **(30/04)**		• Uptake of water and minerals into xylem in roots; • Transport of water and minerals to leaves; • Translocation of manufactured food from leaves to other parts of plant. **INVESTIGATION** Investigate water uptake through the roots and the movement of water through the xylem. (Use *Impatiens* if possible)	**Activity** Describe the translocation of organic substances from the leaves to other parts of the plant. (Diagram) **Activity** Describe the uptake and movement of water through a plant. (Diagram) **Activity** Describe the translocation of organic substances from the leaves to other parts of the plant. (Diagram)	☐ ☐	46%		

Week 5 **5 days** **(08/05)**		**(CAPS p 28) Animal Tissues** Prerequisite knowledge: Basic Cell Structure **Animal tissues: 4 basic types** • Epithelial (squamous, cuboidal, columnar and ciliated) • Connective (blood, cartilage, tendons, ligaments, bone) • Muscle (skeletal, smooth and cardiac referring to voluntary and involuntary action) • Nerve tissue (sensory-, motor- and interneurons) Relationship between structure and function [No detail required – some tissues, e.g., blood and nerves in the reflex arc, will be covered in more detail in relevant sections]	**Activity** Examine and identify the following animal tissues: Epithelial, connective, muscle, nerve tissue using micrographs or posters. **Activity** Tabulate different tissues by drawing the tissue to show specialised structure and functions.	☐ ☐	**59%**		
Week 6 **5 days** **(15/05)**		**Musculoskeletal system Gr 8, Animal Tissues** **Human skeleton:** • the axial skeleton: mention of facial bones, cranium, foramen magnum, palate and jaws • appendicular skeleton The pectoral girdle and upper limbs The pelvic girdle and lower limbs **Functions of skeleton:** • Movement • Protection • Support • Storage of minerals • Hearing	**Activity** Observe and label the human skeleton with the main functions of the skeleton (model or photographs) **Activity** Different tissues by drawing the tissue to show specialised structure and functions. **Activity** Observe and draw a typical long bone: Longitudinal section **INFORMAL TEST:** **Musculoskeletal system, Animal Tissues**	☐ ☐ ☐ ☐	**72%**		

Week 7 **5 days** **(22/05)**		(CAPS) 26. Transport systems in Animals) (Pre-knowledge: **Circulatory System Gr 9, Animal Tissues)** **Transport system/ circulatory system** **Blood circulation system** Pulmonary and systemic (double, closed) circulatory systems • heart and associated blood vessels heart: • internal and external structure related to functioning, • cardiac cycle: • blood flow through the heart **INVESTIGATION** Dissection of mammal heart (sheep, cow or pig) obtained from a butchery. Identify chambers, valves, muscle, blood vessels. (Supported by worksheet.)	**Activity** Draw and label (OR give a diagram of) a blood circulatory system to indicate a double & closed system. Schematic representation of the pulmonary and systemic circulation. **Activity** The external structure of the heart including associated blood vessels with labels.	☐ ☐	**86%**		
Week 8 **5 days** **(29/05)**		**Direction of blood flow**: • difference between oxygenated and deoxygenated blood in different parts of the system • (diagram or schematic drawing) lungs and **pulmonary system,** associated blood vessels major organs and **systemic system**: • associated major blood vessels of brain, small intestine, liver and kidney • Blood vessels: structure and functioning of arteries, veins with valves and capillaries. **INVESTIGATION** In pairs, measure the pulse of one learner before and after exercise. Record, interpret and explain data presented as a graph.	**Activity** The internal structure of the heart. Use different coloured arrows to indicate the flow of blood through the heart. **Activity** Use diagrams to identify the phases of the cardiac cycle (systole & diastole). **Activity** Tabulate and draw with labels and functions to indicate the different types of blood vessels and functions. **INFORMAL TEST:** **Circulatory System, Animal Tissues**	☐ ☐ ☐	100%		

Week 9 **5 days** **(05/06)**		**Revision and Assessment**	**Activities for Revision and Assessment**				
Week 10 **5 days** **(12/06)**		**Assessment**					
Week 11 **4 days** **(19/06)**		**Assessment**					
Week 12 **5 days** **(26/06)** **END OF TERM TWO**		**Assessment**					

Life Sciences - Grade 10 – CAPS (2026)

Annual Teaching Plan - TERM THREE (10 weeks) - 46 DAYS (21 July – 23 September)

Week Number (Week Ending)	Completion Date	Topic for the week	INFORMAL ASSESSMENT TASK/ACTIVITY	TICK	% Curriculum Coverage	SMT Signature and Date	FORMAL ASSESSMENT - SBA
Week 1 **4 days (24/07)**		**(CAPS p 36) History of Life on Earth** **Life's history:** **Change throughout the history of life on Earth** (Pre-knowledge: **Biosphere and Diversity gr 7)** • Different representations of the history of life on earth. • The relationship to Changes in the composition of the atmosphere (e.g., Increases in the levels of oxygen) • Changes in the climate (e.g., Ice ages) • Geological events (e.g., movements of continents) and their effect on the distribution of living organisms (biogeography)	**Activity** Provide the correct term for various phrases/definitions related to Diversity, Change and Continuity Describe factors that have led to changes in life forms that have existed over millions of years **Activity** Construct a timeline showing the history of life on Earth. The timeline should show all the key events from the emergence of the earliest life forms to the present day to emphasise the long history of life.	☐ ☐	**10%**		**Task 5:** **Practical** (Minimum 30 marks) Term Weighting – 25% **Task 6:** **September Controlled Test** (1,5 hours - 75 marks) Term weighting – 75%

Week 2 **5 days** **(31/07)**		**Geological timescale:** Meaning and use of timescales *(details not to be memorised)* **The three eras:** • Paleozoic, • Mesozoic and • Cenozoic. Each era divided into periods *(Names of periods not to be memorised)* **Cambrian explosion:** • Origins of early forms of all animal groups. • Life-forms have gradually changed to become present life forms. • In the last four million years significant changes have occurred in species occurring in Africa (e.g., humans)	**Activity** Use a geological time scale to test the understanding of the three eras and the periods with emphasis on the Cambrian explosion **Activity** Interpret various forms of the geological time scale and representations of the history of life on Earth **INFORMAL TEST:** **History of Life on Earth**	☐ ☐ ☐	**23%**		

Week 3 **5 days** **(07/08)**		**Mass extinctions**: There have been five mass of which are particularly important: • 250 mya (resulted in the extinction of about 90% of all life on Earth) and • 65 mya (resulted in the extinction of many species, including the dinosaurs). • The rate of extinction on the Earth at present is higher than at any time in the past. • The present time has been called the sixth extinction. **Fossil formation** and methods of dating • e.g., radiometric dating and • relative dating	**Activity** Research the "missing link" between dinosaurs and birds (Archaeopteryx) Research the "link" between fish and amphibians (Coelacanth). Present a verbal or written report. **Activity** Various hypotheses have been proposed for the extinction, 65 million years ago, such as the meteorite impact theory and the volcanism (in India) theory. Select ONE of these hypotheses and describe the evidence scientists have gathered in support of it. (Nature of science **Activity** Describe fossil formation and interpretation of data based on methods of dating. **Activity** Examine fossils at a museum or fossil site or look at photographs of fossils. **Optional:** Use plaster of Paris to construct a "fossil".	☐ ☐ ☐ ☐	**36%**		

Week 4 **4 days** **(14/08)**		**(CAPS p 33) Biosphere and Ecosystems** **Biosphere Concept of the biosphere. Inter-connectedness with and components of global ecosystem**: • hydrosphere, • lithosphere, • atmosphere **Biomes** **Terrestrial and aquatic biomes of southern Africa** and • give a general description of how climate, soil and vegetation influence the organisms found in the Biomes. • Location of the different biomes in South Africa **Environment** • Concept of environment to show human activities in and interactions with the natural environment Abiotic and biotic factors: • effects on the community. **Ecosystems** The concept of ecosystem, structure and ecosystem functioning:	**Activity** Draw a mind map to indicate the concept of the biosphere and the components of global ecosystems (spheres). **Activity** Use a map of Southern Africa to indicate the different terrestrial and aquatic biomes. **Activity** Indicate the location, climate, soil, and vegetation of each of the biomes and how climate influence vegetation in each biome. **Activity** Provide the correct term for various phrases/definitions related to Environmental Studies **Activity** Interpret data/draw graphs showing the effect of the abiotic factors on living organisms	☐ ☐ ☐ ☐ ☐	**49%**		

Week 5 **5 days** **(21/08)**		**Abiotic factors:** • physiographic factors (aspect, slope, altitude) • soil (pH, humus content, texture, water retention capacity and air content) • light (day length and seasonal changes) temperature • (effect of day/night and seasons) • water (water cycle and the importance of wetlands) • atmospheric gases wind **Biotic factors:** • Producers, • consumers, • decomposers	**Activity** Use illustrations of ecosystems to identify abiotic and biotic factors. **Activity** Develop food chains and food webs by giving different examples **Activity** Interpret data based on food chains, food pyramids, food webs and energy flow	☐ ☐ ☐	**62%**		
Week 6 **5 days** **(28/08)**		**Energy flow** • through ecosystems and relationship to trophic structure (food pyramids): **Trophic levels:** • producers, • consumers (herbivores and carnivores and omnivores, • decomposers)	**Activity** Describe trophic levels and their relationship to ecosystems **Activity** Use diagrams to show trophic levels and how energy is transferred from on level to the next (energy flow)	☐ ☐ ☐	**74%**		

Week 7 **5 days** **(04/09)**		**Nutrient Cycles:** Flow charts of the following nutrient cycles: • water • oxygen • carbon and • nitrogen (Names e.g. nitrates are required but no detail of chemistry is necessary). **INVESTIGATION** **Fieldwork** Choose ONE ecosystem (close to the school) within a local biome for special study The study must deal with abiotic and biotic factors and the interactions between them; trophic relationships in an ecosystem record and describe seasonal changes over 2 terms: either term 1 and 2 or term 3 and 4 biodiversity within the ecosystem using field guides and keys; positive and/or negative human impact/influence on the ecosystem. Different groups should investigate different factors. Each group must plan, collect, record and present, analyse and evaluate data.	**Activity** Describe nutrient cycles and give examples **Activity** Describe how water, oxygen, carbon and nitrogen is cycled through an ecosystem **Activity** Use flow charts to illustrate the 4 nutrient cycles Interpret flow diagrams based on the water, oxygen, carbon and nitrogen cycles **Activity** Define ecotourism. Describe positive and negative influences that humans may have on the environment **Activity** Describe the advantages and disadvantages of ecotourism **INFORMAL TEST:** **Biosphere and Ecosystems**	☐ ☐ ☐ ☐ ☐	**87%**		

Week 8 **4 days** **(10/09)**		**(CAPS p 33) Biodiversity and classification schemes:** • a way of organising biodiversity. Brief history of classification: • Scientists attempt to classify organisms based on shared features. • As information increases classification changes. One of the currently accepted classification systems is the **five kingdom system;** • Animalia, • Plantae, • Fungi, • Protista and • Monera (Bacteria) **Naming things in science**: • species concept and binomial system. Focus on Linnaeus (Carl von Linneus) and his role in classification systems: Why do we use Latin? **Differences between** • prokaryotes and • eukaryotes (link to cell structure).	**Activity** Describe Principles of classification. Grouping everyday objects on the basis of shared similarities. A simple nested hierarchy. **Activity** Classify a selection of familiar organisms into groups based on visible evidence. Use keys and identification guides. **INFORMAL TEST:** **Biodiversity and Classification**	☐ ☐ ☐	**100%**		

Week 9 **5 days** **(18/09)**		**Revision and Assessment**	**Activities for Revision and Assessment**				
Week 10 **3 days** **(23/09)** **END OF TERM THREE**		**Assessment**	**Assessment**				

Life Sciences - Grade 10 – CAPS (2026)

Annual Teaching Plan - TERM FOUR (10 weeks) 47 - DAYS (06 October – 09 December)

Week Number (Week Ending)	Completion Date	Topic for the week	INFORMAL ASSESSMENT TASK/ACTIVITY	TICK	%Curriculum Coverage	SMT Signature and Date	FORMAL ASSESSMENT - SBA
Week 1 **4 days** **(09/10)**		**CAPS p 35) Biodiversity and Classification** Main groupings of living organisms are bacteria, protests, fungi, plants and animals. Diagnostic features of each of the following: • Bacteria • Protists • Fungi • Plants • Animals	**Activity** List the distinguishing characteristic of each of the five kingdoms. Use biological keys to identify various organisms **Activity** Explain the need for classification and describe the classification system used today **INFORMAL TEST:** **Biodiversity and Classification**	☐ ☐ ☐	**100%**		**Task 7:** **Final Examinations** **Paper 1** (2,5 hours - 150 marks) **Paper 2** (2,5 hours - 150 marks) Exam weighting – 60% SBA Year weighting – 40%
Week 2 **5 days** **(16/10)**		**Revision Paper 1 and 2**	**Revision Paper 1& 2**				
Week 3 **5 days** **(23/10)**		**Revision Paper 1 and 2**	**Revision Paper 1 & 2**				
Week 4 **5 days** **(30/10)**		**Revision Paper 1 and 2**	**Revision Paper 1 & 2**				

Week 5-10 **28 days** **(02/11–09/12)**		**FINAL EXAMINATION (Two Papers)** **Cognitive levels:** Knowing science - 40% Understanding science- 25% Applying scientific knowledge - 20% Evaluating, analysing and synthesising science knowledge - 15% **Degrees of difficulty for examination and test questions:** Easy - 30% Moderate - 40% Difficult - 25% Very difficult - 5%				

PAPER 1	**PAPER 2**
Marks: 150	Marks: 150
Time: 2½ hours	Time: 2½ hours
Learners must answer all 3 questions	*Learners must answer all 3 questions*
Topics and marks	Topics and marks:
Chemistry of life – 33	*Transport systems in mammals – 32*
Cells: Basic units of life- 19	*Biosphere to ecosystems – 54*
Cell division (mitosis) – 19	*Biodiversity and classification – 21*
Plant and animal tissues – 28	*History of life on earth – 43*
Plant organs – 9	
Support and transport systems: Plants – 23	
Support systems: Animals – 19	