Francis Ndau

SCHEME OF WORK
BIOLOGY
FORM 4 2022
TERM II
KATHEKA

WK	LSN	TOPIC	SUB-TOPIC	OBJECTIVES	T/L ACTIVITIES	T/L AIDS	REFERENCE	REMARKS
1	REPORTING							
	2	RECEPTION, RESPONSE & CO-ORDINATION	Meaning of stimulus, response and irritability. Tactic responses.	By the end of the lesson, the learner should be able to: Define of stimulus, response and irritability. Explain the need for sensitivity and response. Identify types of tactics responses.	Brain storming; Exposition; Group experiments-chemotaxis in termites; Discussion.	Brad crumbs, termites, dry sand, moth balls.	KLB BK IV. PP 73-74	
	3	RECEPTION, RESPONSE & CO-ORDINATION	Meaning of stimulus, response and irritability. Tactic responses.	By the end of the lesson, the learner should be able to: Define of stimulus, response and irritability. Explain the need for sensitivity and response. Identify types of tactics responses.	Brain storming; Exposition; Group experiments-chemotaxis in termites; Discussion.	Brad crumbs, termites, dry sand, moth balls.	KLB BK IV. PP 73-74	
	4-5	RECEPTION, RESPONSE & CO-ORDINATION	Tropism and types of tropism.	By the end of the lesson, the learner should be able to: Identify types of tropism. State differences between tropisms and taxes.	Examine previous plant set ?ups on response to light, gravity; Probing questions and discussion.	Seedlings, klinostat, corked beaker.	KLB BK IV. PP 74-78	

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2	1	RECEPTION, RESPONSE & CO-ORDINATION	Nastic responses.	By the end of the lesson, the learner should be able to: Identify types of nastic responses	Q/A and discussion.	text book	KLB BK IV. PP 78-80	
	2	RECEPTION, RESPONSE & CO-ORDINATION	Role of auxins in tropisms.	By the end of the lesson, the learner should be able to: Explain the role of auxins in tropisms.	Examine previous plant set ?ups on response to light, gravity; contact; Probing questions and discussion.	text book	KLB BK IV. PP 80-83	
	3	RECEPTION, RESPONSE & CO-ORDINATION	Role of auxins in tropisms.	By the end of the lesson, the learner should be able to: Explain the role of auxins in tropisms.	Examine previous plant set ?ups on response to light, gravity; contact; Probing questions and discussion.	text book	KLB BK IV. PP 80-83	
	4-5	RECEPTION, RESPONSE & CO-ORDINATION	Response and Co-ordination in animals. The nervous system.	By the end of the lesson, the learner should be able to: State components of the nervous system. Describe the structure of nerve cells.	Descriptive and expository approaches.	Illustrative diagrams.	KLB BK IV. PP 84-85	
3	1	RECEPTION, RESPONSE & CO-ORDINATION	Types of neurons. The brain.	By the end of the lesson, the learner should be able to: Identify types of neurons. Describe structure of the human brain.	Descriptive and expository approaches.	Illustrative diagrams.	KLB BK IV. PP 85-88	
	2	RECEPTION, RESPONSE & CO-ORDINATION	Reflex actions.	By the end of the lesson, the learner should be able to: Differentiate between simple and conditioned reflex actions.	Illustrate a simple reflex arc. Probing questions on differences between simple and conditioned reflex actions.	Illustrative diagrams.	KLB BK IV. PP 88-90	

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	3	RECEPTION, RESPONSE & CO-ORDINATION	Transmission of a nerve impulse.	By the end of the lesson, the learner should be able to: Describe the transmission of a nerve impulse.	Descriptive and expository approaches.	Illustrative diagrams.	KLB BK IV. PP 90-93	
	4-5	RECEPTION, RESPONSE & CO-ORDINATION	Transmission of a nerve impulse. The endocrine system.	By the end of the lesson, the learner should be able to: Describe the transmission of a nerve impulse. Identify components of endocrine system. Compare endocrine system. With nervous system.	Descriptive and expository approaches. Discussion; tabulate the differences.	Illustrative diagrams.	KLB BK IV. PP 90-93 KLB BK IV. PP 93-6	
4	1	RECEPTION, RESPONSE & CO-ORDINATION	The mammalian eye.	By the end of the lesson, the learner should be able to: Identify major parts of the human eye. Explain image formation and interpretation in the eye.	Brain storming; Discussion with probing questions.	Chart- the human eye.	KLB BK IV. PP 93-100	
	2	RECEPTION, RESPONSE & CO-ORDINATION	The mammalian eye.	By the end of the lesson, the learner should be able to: Identify major parts of the human eye. Explain image formation and interpretation in the eye.	Brain storming; Discussion with probing questions.	Chart- the human eye.	KLB BK IV. PP 93-100	
	3	RECEPTION, RESPONSE & CO-ORDINATION	Accommodation of the eye.	By the end of the lesson, the learner should be able to: Explain the role of ciliary muscles in accommodation of the eye.	Discussion with probing questions, Drawing illustrative diagrams.	Chart- focusing far and near points.	KLB BK IV. PP 100-1	

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	4	RECEPTION, RESPONSE & CO-ORDINATION	Accommodation of the eye.	By the end of the lesson, the learner should be able to: Explain the role of ciliary muscles in accommodation of the eye.	Discussion with probing questions, Drawing illustrative diagrams.	Chart- focusing far and near points.	KLB BK IV. PP 100-1	
	3-5	RECEPTION, RESPONSE & CO-ORDINATION	Accommodation of the eye.	By the end of the lesson, the learner should be able to: Explain the role of ciliary muscles in accommodation of the eye.	Discussion with probing questions, Drawing illustrative diagrams.	Chart- focusing far and near points.	KLB BK IV. PP 100-1	
5	MIDTERM BREAK							
6	1	RECEPTION, RESPONSE & CO-ORDINATION	Defects of vision and their correction.	By the end of the lesson, the learner should be able to: Identify defects of vision. Explain correction of vision defects.	Detailed discussion with probing questions; Drawing illustrative diagrams.	Illustrative diagrams.	KLB BK IV. PP 101-4	
	2	RECEPTION, RESPONSE & CO-ORDINATION	The human ear.	By the end of the lesson, the learner should be able to: Identify major parts of the human ear.	Descriptive and expository approaches. Drawn diagrams.	Illustrative diagrams.	KLB BK IV. PP 104-5	
	3	RECEPTION, RESPONSE & CO-ORDINATION	Hearing.	By the end of the lesson, the learner should be able to: Explain how the ear perceives sound.	Descriptive and expository approaches.	Illustrative diagrams.	KLB BK IV. P 106	
	4-5	RECEPTION, RESPONSE & CO-ORDINATION	Body balance and posture. Defects of the ear.	By the end of the lesson, the learner should be able to: Explain how the ear maintains body balance and posture. Identify some defects of the ear.	Descriptive and expository approaches.	text book	KLB BK IV. PP 107-8 KLB BK IV. P 108	

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7	1	SUPPORT & MOVEMENT IN PLANTS AND ANIMALS	Importance of support and movement in plants.	By the end of the lesson, the learner should be able to: Explain the importance of support and movement in plants.	Brain storming; Probing questions; Discussion.	text book	KLB BK IV. PP 111-2	
	2	SUPPORT & MOVEMENT IN PLANTS AND ANIMALS	Arrangement of tissues in a monocotyledonous stem.	By the end of the lesson, the learner should be able to: Draw and label a transverse section of a monocotyledonous stem.	Examine transverse section of a monocotyledonous stem.	Monocotyledo-nous stem, eg. tradescantia, microscope, Razors.	KLB BK IV. PP111-2.	
	3	SUPPORT & MOVEMENT IN PLANTS AND ANIMALS	Arrangement of tissues in a dicotyledonous stem.	By the end of the lesson, the learner should be able to: Draw and label a transverse section of a dicotyledonous stem. Draw and label a transverse section of herbaceous and woody stems.	Examine transverse section of a dicotyledonous stem, herbaceous and woody stems.	Herbaceous stem, microscope, slides, Razors.	KLB BK IV. PP 111-5	

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	4-5	SUPPORT & MOVEMENT IN PLANTS AND ANIMALS	Arrangement of tissues in a dicotyledonous stem. Stem tissues.	By the end of the lesson, the learner should be able to: Draw and label a transverse section of a dicotyledonous stem. Draw and label a transverse section of herbaceous and woody stems. Identify some stem tissues. Explain the role of stem tissues.	Examine transverse section of a dicotyledonous stem, herbaceous and woody stems. Drawing and labeling diagrams; Discussion.	Herbaceous stem, microscope, slides, Razors. Illustrative diagrams.	KLB BK IV. PP 111-5 KLB BK IV. PP 113-5	
8	1	SUPPORT & MOVEMENT IN PLANTS AND ANIMALS	Wilting in plants.	By the end of the lesson, the learner should be able to: Compare the rate of wilting of herbaceous and woody stems. Account for difference in rate of water loss.	Uproot herbaceous and woody plants; Observe tem for about 30 min; Brief discussion.		KLB BK IV. P 116	
	2	SUPPORT & MOVEMENT IN PLANTS AND ANIMALS	The exoskeleton.	By the end of the lesson, the learner should be able to: Describe the structure of the exoskeleton.	Examine movement of a live arthropod; Observe muscles of the hind limb of a grasshopper; Relate the observations to the function of the exoskeleton.	A live arthropod, E.g. grasshopper, millipede.	KLB BK IV. PP 116-7	
	3	SUPPORT & MOVEMENT IN PLANTS AND ANIMALS	The exoskeleton.	By the end of the lesson, the learner should be able to: Describe the structure of the exoskeleton.	Examine movement of a live arthropod; Observe muscles of the hind limb of a grasshopper; Relate the observations to the function of the exoskeleton.	A live arthropod, E.g. grasshopper, millipede.	KLB BK IV. PP 116-7	

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	4	SUPPORT & MOVEMENT IN PLANTS AND ANIMALS	The endoskeleton.	By the end of the lesson, the learner should be able to: Describe the structure of the endoskeleton.	Observe skeleton of a vertebrate; Compare it with an exoskeleton. Discuss the contrasting features.	The human skeleton.	KLB BK IV. PP 117-8	
	4-5	SUPPORT & MOVEMENT IN PLANTS AND ANIMALS	The endoskeleton.	By the end of the lesson, the learner should be able to: Describe the structure of the endoskeleton.	Observe skeleton of a vertebrate; Compare it with an exoskeleton. Discuss the contrasting features.	The human skeleton.	KLB BK IV. PP 117-8	
9-10	EXAMS AND CLOSING							

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