



Provincial Department of Education – Sabaragamuwa – Week School

Subject - Science

Week – April I

Grade -10

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1st term -Revision Exercises

1.

A. The bodies of all organisms are created by a collection of compounds. Among them, bio molecules are mainly participated in building up the bodies of organisms.

- i. Name 4 main bio molecules which are participated in building up the bodies of organisms.
- ii. There are 3 main groups of carbohydrates. For each group of them,
 - a) Write the molecular formula
 - b) Give 2 examples.
- iii. Name the 3 components of a nucleotide.

B. A lot of organic and inorganic compounds contribute to building up the living cells.

- i. Name 2 inorganic compounds which are participated in building up the human body.
- ii. What is an enzyme?
- iii. Write 4 steps of an experiment that can be used to demonstrate the action of amylase on starch.

C. Answer the following questions relevant to the activity about “identification of water as a constituent in foods.”

- i. If the selected food item is boiled grams, what are the things you will need for the experiment?
- ii. If anhydrous Copper sulphate is used to identify water,
 - a) What is the color of the anhydrous Copper sulphate?
 - b) What is the color change of Copper sulphate at the end of the experiment?
- iii. What is the bio molecule that contributes to water preservation in living bodies?
- iv. Explain how the differential expansion of water during freezing helps to aquatic animals.

2.

A. An object which starts moving from rest, move along a straight path at a uniform acceleration and acquires a velocity of 12ms^{-1} . Thereafter it moves at that constant velocity for 6s and ultimately comes to rest with a uniform deceleration during the last 3s.

- I. Sketch the velocity-time graph for the above motion.
- II. Find the acceleration of the object during the first 6s.
- III. Find the distance travelled by the object during the first 6s.
- IV. Find the distance travelled at a uniform velocity.
- V. Find the deceleration of the object during the last 3s.
- VI. Find the total distance travelled by the object.

B. A coconut of a coconut tree that detaches from its stalk takes 5s to fall to the ground.

- I. Find the velocity of the coconut when it lands the ground.
- II. What is the height that coconut fell from?
- III. Sketch the velocity-time graph for the motion of the coconut.

C. Write the standard units for the following quantities.

Physical quantity	Standard unit
Distance	
Displacement	
Time	
Speed	
Velocity	
Acceleration	

3.

A. A part of the periodic table is shown below. The symbols given in it are not the standard symbols of the respective elements.

B				D			L
	S					T	
	K						

- I. Identify two elements belong to the same Group.
- II. What is the highest active element from the above.
- III. Write the formula of the compound formed by the reaction between B and T.

B. The details about few elements are given below. Answer for the following questions using the given details.

Symbol of the element (not standard symbols)	A	B	C	D	E	F	G	H	I	J	K
Number of protons	1	2	17	6	15	16	16	17	20	19	18
Number of electrons	0	2	18	7	16	17	16	20	24	20	18

- I. What is the mass unit of “C”?
- II. Write 2 inactive elements.
- III. Write 2 isotopes.
- IV. What is the Group and the Period that “J” belongs?
- V. Name the element with the relative atomic mass of 39.
- VI. Write the formula of the compound formed by the reaction between D and C.
- VII. What is the valency of “F”?