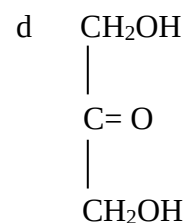
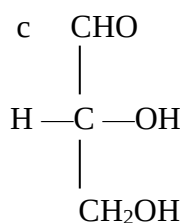
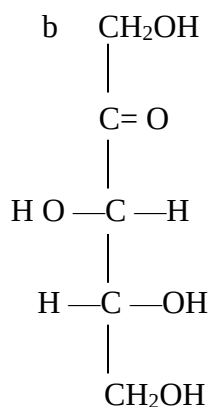
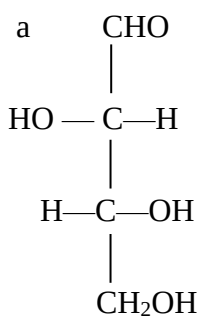




Chemistry Worksheet for grade 12 on unit 6 part TWO

I. Give short answer.

- What are the monomers of
 - natural rubber?
 - neoprene?
 - SBR?
 - butyl rubber?
- What is vulcanization of rubber and how does it affect the properties of rubber?
- What are the major uses of neoprene and SBR?
- Are carbohydrates “hydrates of carbon”? Explain your answer.
- Classify each of the following monosaccharides by its number of carbon atoms and its type of carbonyl group.



6. Write the cyclic forms of galactose and ribose.

7. Write the molecular formula of ribose, glucose, galactose and fructose.

8. What are reducing sugars? Which of the following monosaccharides behave as reducing sugars?

- a. Glucose b. Fructose c. Galactose d. Ribose

9. What monosaccharides are produced from the hydrolysis of the following disaccharides?

- a. sucrose b. maltose c. lactose d. cellobiose

10. What type of glycosidic linkage is present in the following disaccharides?

- a. sucrose b. maltose c. lactose d. cellobiose

11. Write the molecular formula of:

- a. sucrose b. maltose c. lactose d. cellobiose

12. In making candy, sucrose is boiled in water with little acid, such as lemon juice.

a. What is the purpose of adding the lemon juice?

b. Why does the product mixture taste sweeter than the starting sucrose solution?

13. Describe the structural differences and similarities between the following pairs of polysaccharides:

- a. glycogen and amylopectin c. amylose and cellulose
b. amylose and amylopectin d. amylose and glycogen

14. Match each of the following structural characteristics to the polysaccharides.

You can use the characteristics in column B more than once.

Column A

Column B

i. Amylopectin

A. Contains both α -1,4-and α -1,6-glycosidic linkages

ii. Amylose

B. Composed of glucose monosaccharide units

iii. Glycogen

C. Composed of unbranched glucose chains

iv. Cellulose

D. Contains only β -1,4-glycosidic linkage

3. Humans can digest starch but not cellulose. Why?