University of Salahaddin College of Agriculture Engineering science

a. Lactose

a. Green



Sub: Biochemistry Stage: second Time: 1hour

Date: 21/2/2024

Name: Q1/ Choose the correct answer: (only 8) **(40 Marks)** 1. Disaccharides are composed of two monosaccharides joined together by-----. **a.**Peptide bound **b.**Covalen bound **c.** Glycoside bound **2.** The barfoed's test is used to distinguish between-----**a.** Di- and polysaccharide **b.** Mono and disaccharide **c.**Reducing and non reducing sugar **3.** Picric acid test it is clinical test for determination of ----- in blood. **b.** Galactose **a.** Fructose c. Glucose **4.** Molish test is general test used for carbohydrate by using -----reagent. **b.** 5% α-naphthol in ethanol **c.**Aniline **a.**Orcinol **5.** Sucrose is the table sugar composed of -----. **a.** (glucose & glucose) **b.** (glucose & galactose) **c.** (glucose & fructose) **6.** Fehling A solution composed of -----. **a.**Copper sulphate **b.** Sodium potassium tartarate **c.**Sodium hydroxide 7. ----is reducing disaccharide.

c. Sucrose

c. Red

b. Galactose

b. Blue

8. Carbohydrates combine with aniline acetate to give ----- color.

9 used to convert sucrose to glucose and fructose.
a. Mucic acid b. Hydrolysis &inversion c. Phenylhydrazine
10. Mucic acid test used to distinguish from other aldose sugar.
a. Glucoseb. Galactosec. Fructose
Q2/Draw the following structures :(only 6) (30 Marks)
1. α-Galactose 2. Non-Reducing Disaccharide 3. ketohexose 4. Ribulose
5. Lactose (α 1- 4)6. Aldo pentose7.D-glucose8. Dihydroxyaceton9. Mucic acid.
Q3\ answer the following: (only 3) (30 Marks)
1. Define carbohydrate and enumerate diseases associated with carbohydrates?
a.
b.
2. Why sucrose gives a positive test with Selivanoffs test?
3. Why Glucose, Fructose and Mannose gives the same crystal form with Phenylhydrazine test?
4. Draw the diagram classification of carbohydrate?