

Course No: DMEC 1303  
Course Title:  
Bio-Chemistry  
Date: 24 /03 /2015  
No. of Questions: (5)  
Time: 1 hours  
Using Calculator (No)

University of  
Palestine  
  
2nd Semester Exam  
2014/2015

Instructor Name: Mr. Kamal Jarbou  
Student No.: \_\_\_\_\_  
Student Name: \_\_\_\_\_  
College Name: \_\_\_\_\_  
Dep. / Specialist: \_\_\_\_\_  
Using Dictionary (No)  
Total Grade: 20

### Question I. True Or False ( 5 Marks )

1. Photosynthesis is how plants make their starch ( )
2. Fats have higher energy content than carbohydrates ( )
3. Prostaglandin control inflammation ( )
4. Fats are water soluble ( )
5. Fats are important because they absorbed some vitamins like A,D,E, K ( )
6. Some simple lipids are waxes, triglyceride ( )
7. Heparin is natural anticoagulant of human blood ( )
8. Alkynes' are saturated organic compounds ( )
9. Compounds lipids contain (phospholipids, glycolipids, sulpholipids) ( )
10. Monosaccharide in general have sweet taste ( )

### Question II. Choose the correct answer ( 5 Marks )

1. Cellulose is used in diabetes diet because :
  - a) It has low content of energy
  - b) It does not hydrolyze to give glucose
  - c) Has a sweet taste
  - d) None of the above
2. Lactose is a reducing sugar because :
  - a) It hydrolyze into  $\alpha$ -glucose +  $\beta$ -galactose
  - b) We get it from diary product
  - c) It reduce copper from  $\text{Cu}^{+2}$  to  $\text{Cu}^{+1}$
  - d) It is a Disaccharides
3. Cholesterol is:  
a . Derived lipid    b. Compound lipids    c . Simple lipid . d. None

**4. Hydrolysis of Maltose gives:**

- a)  $\alpha$ -glucose +  $\beta$ -galactose
- b)  $\alpha$ -glucose +  $\alpha$  - glucose
- c)  $\alpha$ -glucose +  $\beta$ -fructose
- d)  $\alpha$ -glucose +  $\alpha$ -galactose

**5. Starch has content of**

- a) Phenyl hydrazine + Carboxylic acid
- b) Amylose + Amylopectin
- c) Alcohol + Ester
- d) Anisole + Protein

**6. Prostaglandin  $E_1$ ,  $E_{2a}$**

- a) Can lower blood pressure
- b) Can used in diets
- c) Gives sugar essential for energy
- d) A test to differentiate between disaccharide and monosaccharide

**7. Amine has functional group**

- a) OH
- b)  $\text{CONH}_2$
- c) CHO
- d)  $\text{NH}_2$

**8. Lipoprotein are found in**

- a) Pancreas
- b) Brain
- c) Cell membrane
- d) Liver

**9. Hexoses contain**

- a) Six carbon atoms
- b) Three carbon atoms
- c) Four carbon atoms
- d) Five carbon atoms

**10. Lipids in general have**

- a) High solubility in water
- b) No solubility in water
- c) Low solubility in water
- d) None of the above

**Question III.**

**Explain the Osazone formation (The purpose, the reagent & result (2.5Marks )**

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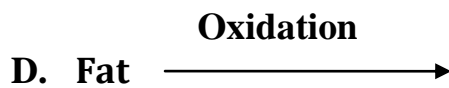
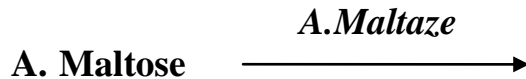
**Question IV.**

**Starch has low contents explain how to differentiate between them as a test (2.5 Marks )**

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**Question V.**

**Complete the following reactions (5 Marks )**



*End of Questions  
Good Luck*