



Sohag University
Faculty of Medicine
Department of Biochemistry



الفرقة الأولى
كيمياء
٥٥ - ٥١

Time: 2Hours
Date: 28-5-2018

Biochemistry Examination
For first year students

All questions to be answered (Formulae are a must whenever possible):

A) Define and discuss two examples : (5 marks each)

1- Deoxy sugar

2-PUFA

3-Peptides

B) Write the full reaction with names (formula) : (5marks each)

1- Combination of the two anomeric carbon (C1 of glucose and C2 of fructose).

2- Conjugation 3 Glycerol, with two phosphatidic acids.

C) On biochemical basis explain : (5marks each)

1- Define albuminoids and discuss one of them.

2- Recombinational double strand breaks repair (diagram).

3 - Eukaryotic promoter of RNA transcription (diagram).

4-Antioxidants

5- Define Glycoproteins and distribution.

D) Choose the single best answer (a,b,c,or d) and put the chosen litter in its corresponding number in a table like that shown at the MCQs (5marks ,ONE mark for each point):

1-Ascorbic acid is an example of

- a. Sugar acid
- b. Sugar alcohol
- c. Sugar phosphate
- d. Deoxy-sugar

2. Amino Inulin is a simple polysaccharide built up of

- a. Glucosamine
- b. Galactose
- c. Fructose
- d. Aldose

3-Hydrogenation of oil is

- a. The basis of artificial fat formation
- b. Oxidation reaction of lipids
- c. The basis for soap formation
- d. All of the above

4-All of the following are aliphatic amino acids except.

- a. Glycine
- b. Alanine
- c. Proline
- d. Lysine

5-All the following statements about genetic code are correct except

- a. It is degenerate
- b. It is unambiguous
- c. It is universal
- d. It is overlapping

E) Mention the name of the disease and other name of the vitamins (5 marks):

1-Vitamin A
3- Vitamin D

2-VitaminK
4- Vitamin E

Good Luck



Sohag University
Faculty of Medicine
Department of Medical Biochemistry



Time: 2Hours
Date: 1-9-2018

الفرقة الأولى

كيمياء

دور ثاني

Biochemistry Examination
For first year students

All questions to be answered (Formulae are a must whenever possible):

A) Define and discuss two examples : (5 marks each)

1- Homopolysaccharids

2-PUFA

B)-Write the structural formula of the following: (5 marks each)

- 1- B- D Fructo pyranose.
- 2- Mucic acid.
- 3- Hyaluronic acid.
- 4- A methyl donor.
- 5- An essential sulfur containing amino acid.
- 6- Arachidonic acid.

C) On biochemical basis explain : (5marks each)

1-Tertiary antioxidants

2- Initiation step of protein synthesis (with diagram).

3 - Rancidity.

D) Tabulate three differences between the following : (5 marks each)

- 1- Prokaryotic promoter and Eukaryotic promoter of transcription.
- 2- Keratin, Collagen and Elastin.
- 3- Glucose and galactose.

E)Choose the single best answer (a,b,c,or d) and put the chosen litter in its corresponding number in a table like that shown at the MCQs (5 marks ,ONE mark for each point):

(1) The visual pigment of human rod cells is

- a) Opsin b) Metarhodopsin c) Rhodopsin d) Iodopsin

(2) Which of the following is not phospholipid

- a) Cerebrosid b) Plasmalogen
c) Sphingomyelin d) Cephaline

(3) Which of the following enzymes requires ATP as a source of energy

- a) DNA polymerase III b) Helicase c) DNA polymerase I
d) Single-stranded binding protein

(4) Chondroitin sulphate-B:

- a) Contain sulfur at C6 of N-acetyl galactosamia
- b) Contain glucuronic acid.
- c) Gives red colour with iodine.
- d) Contains L-iduronic acid.

(5) Invert sugar is :-

- a) Levorotatory
- b) Non-reducing
- c) Called table sugar
- d) Present in molasses

Good Luck

الامتحان الشفوي والحلى لجميع الطلبة والطالبات يوم السبت ١٨-٩-٢٠١٨م بعد الامتحان النظري مباشرة في قسم الكيمياء الحيوية التطبيقية