*KAFR EL. SHEIKH University*

*Faculty of Vet. Medicine*

*Biochemistry Department*

## Biochemistry of Reproduction Exam For Diploma of Artificial insemination

Time allowed: 2 hours Date: 28/04/2014.

**Please answer the following questions.**

## 1 - Write full account on: - (10 marks)

1. Conversion of glucose to fructose via non phosphorylative mechanism. (4 marks)
2. Oxidative phosphorylation in respiratory chain of mitochondria. (3 marks)
3. Anaerobic dehydrogenases. (3 marks)

## 2- Give brief account on: - (10 marks)

1. Hereditary fructose intolerance. (2 marks)
2. Oxidation of Palmitic acid and calculate energy yielding. (8 marks)

## 3- Fill in the spaces with the suitable word(s): - (5 marks)

1. Ram spermatozoa can convert glucose to …………… . (1 mark)
2. ………….. is ketohexose sugar. (1 mark)
3. Plasmalogens resemble phosphatidyl ethanolamine but possess an ………….. . (1 mark)
4. ………….. is basic amino acid. (1 mark)
5. DNA contains ……………. sugar. (1 mark)

**Good luck**

**Prof. Dr.: I. F. Hassan**

**Prof. Dr.: Kh. Kahilo**

1. Inositol
2. Fructose
3. Ether link
4. Lysine
5. Deoxyribose

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