Medical Biochemistry Department
Second Year, Final Exam
August, 25th, 2014
Time Allowed: 2 hours (50 marks)

جامعة الفيوم
Fayoum University

I. Mention (only names): (6 marks)

1. Two hereditary metabolic disorders that lead to postprandial hypoglycemia.
2. Two hormones formed by transmethylation reactions.
3. Two activators of PFK-2.
4. Two congenital syndromes associated with unconjugated hyperbilirubinemia.
5. Two fates of succinyl-CoA.
6. Two folate antagonists.

II. On biochemical bases explain the following: (18 marks)

1. The term "acholuric jaundice" is used in hemolytic jaundice.
2. Glutamic acid is important in brain metabolism.
3. The neuropsychiatric symptoms that occur in acute porphyria.
4. DM may be associated with hyperlipidemia.
5. Hyperglycinemia is associated with severe mental retardation.
6. Ammonia has anabolic effects.

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III. Give a short account of: (20 marks)

1. Neonatalphysiological jaundice.
2. Drugs used for treatment of gout.
3. galactosemia.
4. Functions and derivatives of glutamate.

V. Problem solving: (6 marks)

A breast-fed baby was admitted to Fayoum University Hospital suffering from lethargy, drowsiness and convulsions. Estimated serum ammonia was 6 mg/dL.

1. What is your possible diagnosis?
2. What is the biochemical mechanism for the encephalopathy?
3. What are the genetic defects that cause this condition?

********** Good Luck **********

Assist. Prof. Dr. Amr Zahra