(96)

UNIVERSITY OF RUHUNA – FACULTY OF MEDICINE

ALLIED HEALTH SCIENCE DEGREE PROGRAMME

FIRST B PHARM PART II EXAMINATION- FEBRUARY 2013

PH 1232 BIOCHEMISTRY II

DATE : 19.02.2013 **TIME: 9.00a.m.- 11.00 a.m**

INDEX NO .....

INSTRUCTIONS

- Answer all questions.
- No paper should be removed from the examination hall.
- Marks will be deducted for illegible hand writting.
- Do not use any correction fluids.

1. Explain the followings.

1.1. Plasma Proteins **(30marks)**

1.2. Enzymes involved in heme biosynthetic pathway **(40 marks)**

1.3. Structure and function of Hemoglobin **(30marks)**

97

2.

2.1 What are the functions of proteins? **(25marks)**

2.2 Explain the role of ribosomes in protein synthesis. **(25marks)**

2.3 "Newly synthesized proteins can be subjected to modifications". Briefly comment on the statement. **(25marks)**

2.4 Indicate how a protein production can be controlled at mRNA level. **(25 marks)**

98

3.

3.1 Write a short note on fate of the ingested lipids via food. **(25 marks)**

3.2 Explain the role of mitochondria in lipid metabolism. **(25marks)**

3.3 Indicate the key steps of fatty acid biosynthesis. **(25marks)**

3.4 List out the different functions of lipids. **(25marks)**

99

4.

4.1 Outline key features of a eukaryotic DNA replication fork. **(25marks)**

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4.2 "DNA can be subjected to modifications". Explain the statement. **(25marks)**

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4.3 Indicate the harmful effects of DNA modifications. **(25marks)**

4.4 Explain the key features of cellular machinery to recover DNA damage. **(25marks)**