



UNIVERSITY OF JAFFNA, SRI LANKA
UNIT OF ALLIED HEALTH SCIENCES

FIRST YEAR FIRST SEMESTER BASIC SCIENCES EXAMINATION-DECEMBER 2019

AHSBB 1146 – BASIC BIOCHEMISTRY - PAPER II

Date: 03.12.2019

Time: 2 Hours

ANSWER ALL SIX QUESTIONS

Answer each Question on Separate Answer Book.

1. The total serum bilirubin of a newborn baby was, 13 mg / dl.
 - 1.1 Name the probable condition. (10 Marks)
 - 1.2 List the probable causes for the above condition. (25 Marks)
 - 1.3 Explain the causes leading to the above observation. (55 Marks)
 - 1.4 What treatment is usually suggested for the newborn babies with the above condition? (10 Marks)

2.
 - 2.1 List the probable causes of Type I diabetes mellitus. (30 Marks)
 - 2.2 Write short notes on glycosylated haemoglobin. (20 Marks)
 - 2.3 Give the principle of the method which is used to measure plasma glucose specifically. (15 Marks)
 - 2.4 Untreated diabetes mellitus patients lose weight. Explain. (35 Marks)

3. 3.1 Diagrammatically show the metabolism of VLDL. (30 Marks)
- 3.2 Give reasons for the development of ketoacidosis. (30 Marks)
- 3.3 Explain the role of liver and kidney in the detoxification of ammonia. (40 Marks)
4. 4.1 Explain the different tests which could be carried out to test
- 4.1.1 iron metabolic disorders. (35 Marks)
- 4.1.2 thyroid function. (40 Marks)
- 4.2 Explain the process and advantages of parboiling the rice. (25 Marks)
5. 5.1 Explain the role of vitamin A in vision. (50Marks)
- 5.2 Calculate the daily calorie requirement of a 50 year old 170cm of height and 75kg of weight sedentary adult female. (35Marks)
- 5.3 Calculate the amounts (in grams) of carbohydrate, lipid and protein the female has to consume to obtain the calorie mentioned in Section 5.2. (15Marks)
6. 6.1 What is acquired immunity? (30 Marks)
- 6.2 Show how Glucose -6- phosphatase deficiency causes hyperuricemia when the person consumes high amount of alcohol? (40 Marks)
- 6.3 Explain the steps involved in the posttranslational modification of collagen? (30 Marks)

