

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES

FIRST YEAR FIRST SEMESTER EXAMINATION IN BPharmHons -2022

PHABP 1153 –BIOCHEMISTRY FOR PHARMACY-I
(15TH AND 16TH BATCHES)

PAPER II

Date: 07.12.2023

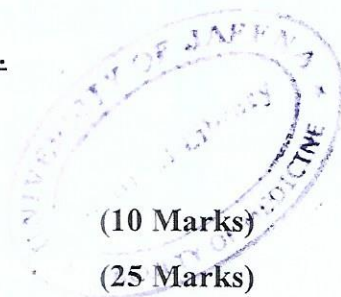
Time: 2 Hours

ANSWER ALL SIX QUESTIONS ON SEPARATE ANSWER BOOK.

1. The total serum bilirubin of a new born baby was, 13 mg/dL.
 - 1.1 Name the probable clinical condition. (10 Marks)
 - 1.2 List the probable causes for the above condition. (25 Marks)
 - 1.3 Explain the causes leading to the above condition. (55 Marks)
 - 1.4 Name the treatment that is commonly practiced to treat the new born babies with the above condition? (10 Marks)

2.
 - 2.1 Draw and label the structure of tRNA. (20 Marks)
 - 2.2 Write Short notes on phospholipids (25 Marks)
 - 2.3 Explain how cells self-regulate energy production. (25 Marks)
 - 2.4 Explain how iron is absorbed by the intestinal mucosal cells and enters the blood stream. (30 Marks)

3.
 - 3.1 Show how monoclonal antibodies are formed against a protein? (40 Marks)
 - 3.2 Diagrammatically show the differences in serum electrophoretic pattern of a multiple myeloma patient from that of a normal person. (20 Marks)
 - 3.3 Explain how thyroid hormone is formed and secreted by the thyroid gland. (40 Marks)



4. 4.1 List the contents of Oral Rehydration Salt (ORS) and the uses of the contents. (35 Marks)
- 4.2 Explain how dietary lipids are digested and absorbed? (35 Marks)
- 4.3 Give the functions of glycosaminoglycans with examples. (30 Marks)
5. Write short notes on
- 5.1. Salting Out. (20 Marks)
- 5.2 Structure of Insulin. (20 Marks)
- 5.3 Functions of Albumin. (25 Marks)
- 5.4 Denaturation of Proteins. (15 Marks)
- 5.5 Structure of Myoglobin (20 Marks)
6. 6.1 Explain the role of
- 6.1.1 vitamin A in dim light vision. (30 Marks)
- 6.1.2 vitamin D in calcium homeostasis. (30 Marks)
- 6.2 Explain with an example how competitive inhibitors act. (20 Marks)
- 6.3 Explain how the $\text{HCO}_3^-/\text{H}_2\text{CO}_3$ buffer system is effective in blood pH maintenance. (20 Marks)