

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LP 4254)

AUGUST 2019

Sub Code: 4254

**B.PHARM. DEGREE EXAMINATION
FIRST YEAR
PAPER IV – BIOCHEMISTRY**

Q.P. Code: 564254

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Define proteins and classify it based on functions with examples.
b) Write a note on the different levels of organization of protein structure.
2. a) Write in detail about the co-enzyme form, biochemical function, deficiency diseases of Pyridoxine.
b) Discuss the metabolism of Iron.

II. Write notes on:

(8 x 5 = 40)

1. HMP shunt and its importance.
2. Fatty acid and its importance.
3. Structure and functions of messenger RNA (mRNA).
4. Note on factors affecting enzyme activity with suitable example.
5. Bile salts.
6. Folic acid.
7. Renal function tests.
8. Biochemical role of haemoglobin.

III. Short answers on:

(10 x 2 = 20)

1. Write the functions of 2, 3-Bis-phosphoglycerate.
2. Biochemical functions of Vitamin C.
3. Write the structure and functions of Cholesterol.
4. What is Heparin and give its functions?
5. Write the functions of Glutathione.
6. Lesch-Nyhan syndrome.
7. What are the functions of Vitamin K?
8. Define Nitrogen balance and its significance.
9. Hyperthyroidism.
10. Leukotrienes.
