



(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 aci
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.

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