

F/2016/1946

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**FIRST YEAR (NEW) PHARMACY
BIOCHEMISTRY AND CLINICAL PATHOLOGY
(104)**

Time : Three Hours

Maximum Marks : 80

Note : i) Attempt total *six* questions. Question No.1 is compulsory from the remaining questions attempt any *five*.

ii) Answer each next main question from a new page.

iii) Draw diagram/ sketch where necessary.

1. a) Fill in the blanks.

i) Vitamin C is also known as _____.

ii) Iodine is used in the synthesis of _____ in the body.

iii) Benedict test is used in the identification of _____.

iv) Protein is the polypeptide of _____.

v) Phenylalanine is _____ amino acid.

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P.T.O.

(2)

b) Match the column 'A' against column 'B'. 5

Column 'A'	Column 'B'
i) Pectin	1) Disaccharide
ii) Lactase	2) Normal constituent of urine
iii) Urea	3) Abnormal constituent of urine
iv) Creatine	4) Reducing sugar
v) Tollen Reagent	5) Polysaccharide

2. Attempt any two. $7 \times 2 = 14$

a) Give qualitative test for identification of Lipids (any two). <http://www.rgpvonline.com>

b) Discuss the structure of protein with example.

c) Describe disease related to abnormal carbohydrate metabolism.

3. Explain the following terms. (any four) 14

- Beri-Beri
- Platelets
- Co-enzyme
- Lymphocytes
- Enantiomers

4. Attempt any two.

7 × 2 = 14

- a) Describe qualitative test for detection of reducing sugars (any two).
- b) Write source, function and deficiency disease of Vitamin D.
- c) Discuss various factors affecting enzymatic action.

5. Attempt any two.

7 × 2 = 14

- a) Briefly classify enzymes.
- b) Discuss the importance of calcium and fluorine in relation to human body.
- c) Enlist the abnormal constituent of urine. Discuss pathological importance of any two of them.

6. Write notes on any two.

7 × 2 = 14

- a) Glycolysis
- b) Citric Acid Cycle
- c) Urea Cycle

7. Attempt any two.

$7 \times 2 = 14$

- a) Classify lipids with examples.
- b) Give the mechanism of enzymatic action.
- c) Give chemical structure of :
 - i) Two essential amino acid
 - ii) Two non-essential amino acid

8. Write notes on any two.

$7 \times 2 = 14$

- a) Function of Proteins
- b) Blood clotting
- c) Water Metabolism

