

S/2016/1946

Total Pages : 4

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 with a new page.

iii) Illustrate your answer with neat sketches wherever necessary.

1. Define the following with examples (Any five)

2 each

- a) Lipids
- b) Amino acids
- c) Iso-Enzymes
- d) Hyperglycemia
- e) Glycogenolysis
- f) Diabetes

2. Solve any four from the following

14

a) Classify Carbohydrates with suitable examples.

b) Give the structure of

i) Glucose

ii) Fructose

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- c) Give two identification test for carbohydrates
- d) Explain Glycolysis
- e) Draw citric acid cycle

3. Solve any four from the following 14

- a) Classify amino acids with suitable examples
- b) Describe any two tests of amino acids
- c) Give structure of any two Non- essential amino acids <http://www.rgpvonline.com>
- d) Explain primary and secondary structures of protein
- e) Describe Urea Cycle

4. Solve any four from the following 14

- a) Give biological importance of lipids
- b) Classify lipids with suitable examples
- c) Define the terms under lipids
 - i) Acid Value
 - ii) Saponification Value
- d) Describe essential fatty acids
- e) Explain β -oxidation of fatty acids

5. Solve any four from the following 14

- a) Classify the vitamins with examples
- b) Give structure, biochemical role and deficiency diseases of ascorbic acid
- c) Differentiate between enzyme and co-enzyme
- d) Explain the role of Vitamin-D in Human body

✓e) Explain the diseases caused due to deficiency of
following vitamins

✓i) Vitamin-A —

✓ii) Vitamin-B1 —

6) Solve any four from the following 14

✓a) Give the dietary source of following

i) Iodine

ii) Calcium

✓b) Give the deficiency diseases of followings

i) Zinc —

ii) Copper —

✓c) Give the physiological functions of iron

✓d) Describe the regulation of water

✓e) Write a note on phosphorus

7. Solve any four from the following 14

✓a) Discuss clinical significance of enzyme

✓b) Classify enzymes with examples

✓c) Discuss the mechanism of enzyme action

✓d) Explain the various factors affecting enzyme action

✓e) Explain the terms

i) SGOT

ii) SGPT

8. Solve any four from the following

14

a) Explain the terms

i) Megaloblastic Anaemia

ii) Leukaemia

b) Write the chemical examination of bile pigments in urine.

c) Name the abnormal constituents of Urine

d) Explain the characteristics of Normal Urine

e) Write the following tests

i) Barfoed's Test

ii) Xanthoproteic Test

