

September 2009

[KV 803]

Sub. Code: 3803

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008 - 2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

Paper III – MEDICINAL BIOCHEMISTRY

Q.P. Code : 383803

Time : Three hours

Maximum : 70 marks

Answer All questions

I. Essay Questions :

(2 x 20 = 40)

1. a) Define and classify enzymes. Discuss the various factors affecting enzyme activity.
b) Explain Glycolysis with its energetics.
2. a) What are ketone bodies. Write in detail about Ketogenesis.
b) Discuss in detail about radioimmuno assay and enzyme linked immunosorbent assay.

II. Write Short Notes :

(6 x 5 = 30)

1. Oxidative phosphorylation.
2. Urea – cycle.
3. Replication.
4. Vanden – Berg reaction.
5. Lipoproteins.
6. Urine concentration tests.

March 2010

[KW 803]

Sub. Code: 3803

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008 - 2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

Paper III – MEDICINAL BIOCHEMISTRY

Q.P. Code : 383803

Time : Three hours

Maximum : 70 marks

Answer All questions

I. Essay Questions :

(2 x 20 = 40)

1. a) Explain TCA cycle in detail with its energetics.
b) Discuss the β – oxidation of saturated fatty acids.
2. a) Write the biosynthesis of pyrimidine nucleotides.
b) Enumerate the various liver function test and discuss the tests for serum bilirubin and urine bilirubin.

II. Write Short Notes :

(6 x 5 = 30)

1. Transport across cell membranes.
2. Co enzymes.
3. GTT.
4. Various components of electron transport chain.
5. Protein biosynthesis.
6. Jaundice.

September 2010

[KX 803]

Sub. Code: 3803

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008 - 2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

Paper III – MEDICINAL BIOCHEMISTRY

Q.P. Code : 383803

Time : Three hours

Maximum : 70 marks

Answer All questions

I. Essay Questions :

(2 x 20 = 40)

1. Describe the reaction, regulation and metabolic significance of citric acid cycle.
2. Discuss in detail about the metabolism of Cholesterol.

II. Write Short Notes :

(6 x 5 = 30)

1. Cyclic AMP and their biological significance.
2. Anaerobic dehydrogenases involved in biological oxidation.
3. Therapeutic and diagnostic applications of Coenzyme A.
4. Metabolic disorders of Amino acids.
5. DNA replication.
6. Kidney Function Tests.

May 2011

[KY 803]

Sub. Code: 3803

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008 - 2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER III – MEDICINAL BIOCHEMISTRY

Q.P. Code : 383803

Time : Three hours

Maximum : 70 marks

Answer All questions

I. Essay Questions :

(2 x 20 = 40)

1. a) Define enzymes. Classify them and describe the factors affecting enzyme activity. (14)
- b) What are coenzymes? Describe the biochemical role of niacin and pyridoxine. (6)
2. a) Define lipids and Explain beta oxidation of fatty acids with its energetics. (14)
- b) Atherosclerosis. (6)

II. Write Short Notes :

(6 x 5 = 30)

1. Explain in detail about ATP and its biological significance.
2. Write a brief note on metabolic disorders of carbohydrates.
3. Radio immuno assay.
4. Hyperbilirubinemia.
5. Lipoproteins - Types and functions.
6. HMP Shunt- A brief account.

October 2011

[KZ 803]

Sub. Code: 3803

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER III – MEDICINAL BIOCHEMISTRY

Q.P. Code : 383803

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. a. Reactions of Oxidative Phosphorylation b. Components of respiratory chain c. Chemiosmotic theory.	17	40 min.	20
2. a. Reactions of TCA b. Energetics of TCA c. Reactions of β Oxidation	17	40 min.	20

II. Write notes on :

1. Active transport.	4	10 min.	6
2. Structure of cholesterol and its functions.	4	10 min.	6
3. Determination of sodium in serum.	4	10 min.	6
4. Transamination.	4	10 min.	6
5. Porphyrrias.	4	10 min.	6
6. Purine catabolism.	4	10 min.	6
7. Maple syrup urine and alkatonuria.	4	10 min.	6
8. ELISA.	4	10 min.	6
9. Vandenburg.	4	10 min.	6
10. Creatinine clearance test.	4	10 min.	6

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**FIRST YEAR****PAPER III – MEDICINAL BIOCHEMISTRY***Q.P. Code : 383803***Time : 3 hours
(180 Min)****Maximum : 100 marks****Answer ALL questions in the same order.****I. Elaborate on :**

Pages (Max.)	Time (Max.)	Marks (Max.)
-----------------	----------------	-----------------

- | | | | |
|---|----|----|----|
| 1. Write a detailed note on the Urea cycle with reactions. Mention its major metabolic disorders. | 17 | 40 | 20 |
| 2. Explain the semi conservative replication of a double stranded DNA molecule. Add a note on its repair mechanism. | 17 | 40 | 20 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Explain the Van den Bergh reaction. | 4 | 10 | 6 |
| 2. Discuss the biological significance of cyclic – adenosine monophosphate (c-AMP). | 4 | 10 | 6 |
| 3. Write a note on Atherosclerosis. | 4 | 10 | 6 |
| 4. Explain the mechanism of Transamination. | 4 | 10 | 6 |
| 5. Explain the biochemical organisation of a cell. | 4 | 10 | 6 |
| 6. Enumerate the IUB classification of enzymes with example. | 4 | 10 | 6 |
| 7. Explain the Galactose tolerance test. | 4 | 10 | 6 |
| 8. What are the various types of Porphyrrias. | 4 | 10 | 6 |
| 9. Write a note on Urine analysis. | 4 | 10 | 6 |
| 10. Write a note on Urea clearance. | 4 | 10 | 6 |

[LB 803]

OCTOBER 2012
PHARM. D DEGREE EXAMS
FIRST YEAR
PAPER III – MEDICINAL BIOCHEMISTRY
Q.P. Code : 383803

Sub. Code: 3803

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages Time Marks
(Max.)(Max.)(Max.)

- | | | | |
|--|----|----|----|
| 1. Explain the Hexose Monophosphate (HMP) Shunt. Add a note on its significance. | 17 | 40 | 20 |
| 2. Explain the various functions of liver. Elaborate any two liver function tests. | 17 | 40 | 20 |

II. Write notes on:

- | | | | |
|--|---|----|---|
| 1. Write a note on Creatinine clearance test. | 4 | 10 | 6 |
| 2. Discuss Radio Immuno Assay. | 4 | 10 | 6 |
| 3. Discuss Adenosine triphosphate (ATP) as an energy rich compound. | 4 | 10 | 6 |
| 4. Discuss the diagnostic applications of iso-enzymes. | 4 | 10 | 6 |
| 5. Write a note on Diabetes mellitus. | 4 | 10 | 6 |
| 6. Write a note on Hypercholesterolemia. | 4 | 10 | 6 |
| 7. Explain the collection of blood samples in a clinical chemistry laboratory. | 4 | 10 | 6 |
| 8. Enumerate the factors affecting enzyme activity. | 4 | 10 | 6 |
| 9. Explain Oxidative phosphorylation. | 4 | 10 | 6 |
| 10. What are the features of Genetic code. | 4 | 10 | 6 |

[LC 803]

APRIL 2013
PHARM. D DEGREE EXAMS
FIRST YEAR
PAPER III – MEDICINAL BIOCHEMISTRY
Q.P. Code : 383803

Sub. Code: 3803

Time : 3 hours

Maximum : 100 marks

I. Elaborate on :

(2x20=40)

1. Write a detailed note on the Urea cycle with reactions. Mention its major metabolic disorders.
2. Explain the semiconservative replication of a double stranded DNA molecule. Add a note on its repair mechanism.

II. Write notes on :

(10x6=60)

1. Explain the Van den Bergh reaction.
2. Discuss the biological significance of cyclic – adenosine monophosphate (c-AMP).
3. Write a note on Atherosclerosis.
4. Explain the mechanism of Transamination.
5. Explain the biochemical organisation of a cell.
6. Enumerate the IUB classification of enzymes with example.
7. Explain the Galactose tolerance test.
8. What are the various types of Porphyrias.
9. Write a note on Urine analysis.
10. Write a note on Urea clearance.
