

I/VI PHARM-D (REGULAR) EXAMINATIONS, DECEMBER - 2022

First Year

MEDICINAL BIOCHEMISTRY

Time : Three Hours

Maximum : 70 Marks

Answer any FIVE Questions.

5x14 = 70 M

All Questions carry equal marks

1. Brief note on
 - (i) Catabolism of amino acids.
 - (ii) Urea cycle and its metabolic disorders.
2. Explain in detail about inhibition of protein synthesis, Genetic code & ELISA ? And note on TCA cycle.
3. Discuss about following test ?
 - (i) Serum lipids.
 - (ii) Triglycerides.
 - (iii) Urine concentration test.
 - (iv) Test for hepatic dysfunction bile pigments metabolism.
4. Write a note on
 - (i) HMP Shunt.
 - (ii) Glycogenolysis & Gluconeogenesis.
 - (iii) Biochemical role of coenzymes.
 - (iv) Glycolysis.
5. Write a note on clinical chemistry.
6. Brief note on

[P.T.O.]

- (i) Compartments of electrolytes.
 - (ii) Determination of Na, Ca^{2+}K^+ , bicarbonates in body fluids.
 - (iii) DNA replication.
7. Write note on cell biochemical organization, transport process across cell, sATP & AMP cyclic.



Total No. of Questions : 8]

P.D 1.3

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I/VI PHARMA-D (REGULAR) DEGREE EXAMINATIONS, DEC- 2021

First Year

MEDICINAL BIOCHEMISTRY

Time : Three Hours

Maximum : 70 Marks

Answer any FIVE Questions.

5x14 = 70 M

All Questions carry equal marks

1.
 - a) Write in brief on energy rich compounds.
 - b) Discuss the mechanisms of enzyme action.
 - c) Write in detail on biochemical role of NADH and Coenzyme Q.
2.
 - a) With a neat scheme explain glycolysis.
 - b) Discuss the role of insulin on glucose metabolism.
 - c) Write a short notes on glucose tolerance test.
3.
 - a) Explain the biosynthesis of fatty acids.
 - b) Write short notes on ketogenesis and ketolysis.
 - c) What is hypercholesterolemia ?
4.
 - a) Write in brief on 'nitrogen balance' and 'protein turnover'.
 - b) Outline the biosynthesis of bile pigments.
 - c) Write in brief on any two metabolic disorders of amino acids.
5.
 - a) What is genetic mutation ? How does it cause a disease ?
 - b) Write variuos steps involved in biosynthesis of purine nucleotides.
 - c) Write in brief on inhibition of protein biosynthesis.
6.
 - a) Write in detail on tests for presence of NPN constituents in urine.

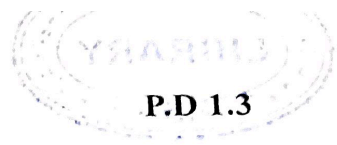
[P.T.O.]

- b) Write the principle, procedure and application of the following estimations :
- (i) Urine glucose.
 - (ii) Serum bilirubin.
7. a) Write principle, procedure involved in determination of hormone levels in serum using RIA.
- b) Explain the biochemical role and importance of the following ions
- (i) bicarbonate.
 - (ii) Sodium.
8. Write reasons for the following.
- a) Mitochondria is the power house of cell.
 - b) Amino acids can produce energy.
 - c) Cyanide can block Electron Transport Chain.



Total No. of Questions :08]

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I/VI Pharm.D (Regular) DEGREE EXAMINATIONS, JULY/AUGUST-2019
(Examination at the end of First year of 6 Year course)

MEDICINAL BIOCHEMISTRY

Time: Three Hours

Maximum marks:70

Answer any FIVE questions.

All questions carry equal marks.

5X14=70M

1. Write in detail on
 - a) Chemical constitution of cell membrane
 - b) Carrier mediated transport across cell membrane
2. What is a coenzyme? Give examples. Write in detail on the coenzymes involved in oxidoreductase enzyme activity. Add a note on relation between coenzymes and vitamins.
3. Write in detail on the biological significance and regulation of
 - a) Glycogenesis
 - b) HMP Shunt
4. Write short notes on
 - a) Ketone bodies
 - b) Hyperlipidemia
 - c) Jaundice
5. Write in brief on
 - a) Gene Mutation in health and disease
 - b) Purine metabolism
6. Discuss the following
 - a) Kidney function tests
 - b) Tests for Hepatic dysfunction
7. Write the principle involved in the estimation and diagnostic utility of
 - a) Urine glucose
 - b) LDL cholesterol
 - c) SGPT
 - d) Urine calcium
8. Write short notes on
 - a) ELISA
 - b) Bicarbonates in Body fluids

I/VI PHARM.D (Regular) DEGREE EXAMINATIONS, JULY/AUGUST- 2017

(Examination at the end of First year of 6 Year course)

Paper III- MEDICINAL BIOCHEMISTRY

Time: Three Hours

Maximum marks:70

Answer any FIVE questions.

All questions carry equal marks.

5X14=70M

1. Write short notes on
 - a) Transportation across cell membrane
 - b) Creatine phosphate
2. a) What are cofactors? Discuss the biological significance of any two co-factors.
b) Write in brief on regulation of glycogen reserves.
3. a) Write in detail on beta oxidation of fatty acids.
b) Write a note on ketone bodies.
4. Write short notes on
 - a) Mutation
 - b) Diabetes mellitus
 - c) Jaundice
5. What are bile salts? Explain their biosynthesis and clinical significance.
6. What are liver function tests? Write in brief on tests used for metabolic and synthesizing capacity of liver.
7. With a neat diagram explain the principle, instrumentation and applications of ELISA
8. Write in detail on significance of
 - a) Thiamine
 - b) Serum calcium
 - c) Serum potassium

Total No. of Questions :08]

P.D 1.3

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I/VI Pharm.D DEGREE EXAMINATIONS, AUGUST/SEPTEMBER-2016
(1st and 2nd Semesters)

PAPER-III

MEDICINAL BIOCHEMISTRY

Time: Three Hours

Maximum marks:70

Answer any FIVE questions.

All questions carry equal marks.

5X14=70M

1. Write short notes on
 - a) Cell membrane
 - b) Acetyl-CoA
 - c) Creatinine phosphate
2.
 - a) What are coenzymes? Explain the role of NADH and ubiquinone as co-enzymes.
 - b) Write in brief on hormonal regulation of glucose metabolism.
3.
 - a) Explain how glucose is biosynthesized from amino acids?
 - b) Write a note on regulation of ATP synthesis
4. Write short notes on
 - a) DNA repair mechanisms
 - b) Jaundice
 - c) Fatty liver
5. What are bile pigments? Explain their biosynthesis and clinical significance.
6. Write in brief on
 - a) Liver Function Tests
 - b) LDL cholesterol
 - c) Creatinine clearance ratio
7. With a neat diagram explain the principle, instrumentation and applications of Radio Immuno Assay.
8. Write in detail on clinical significance of
 - a) Body water
 - b) Serum sodium level
 - c) Serum chloride level