

GOVT. COLLEGE FOR WOMEN (A) SRIKAKULAM

DEPT. OF BIOCHEMISTRY

1ST B.Sc SEMESTER –I, PAPER-I

BIOCHEMISTRY

MODEL QUESTION PAPER

CODE: BCH-I

TIME:3hrs.

MARKS:75

SECTION-I

write essay Question Answer any Five of the following

5x10=50

1) a) write about the Biological Buffers?

(OR)

b) Write about the PH and Pka values of water ?

2) a) Write the Classification of Carbohydrates?

(OR)

b) Write the Homo poly Saccarides?

3) a) Write the general properties of fats& Oils?

(OR)

b) Membrane composition and organization (fluid mosaic model)

4) a) Write the Titration curve of glycogen? PH &pka Valey?

(OR)

b) Structural Organization of Proteins?

5) a)Write about the structure of Nucleic acid watsoncrick double bellive model.

(OR)

b) Write the Structure of cytochrome?

Section-II

Short Questions Answer any five of the following

5x5=25

1. Electrical Conductivity?
2. Analysis of Drinking water & pond water?
3. Write about the disaccharides?
4. Bacterial cell wall of Poly saccharine?
5. Write the Phospholipids?
6. Write about the Lipo Proteins?
7. Naturally accruing Peptides?
8. Denaturations of Proteins?
9. Structure of t.RNA?
10. Structure of Chloro phil?

GOVT. COLLEGE FOR WOMEN (A) SRIKAKULAM

DEPT. OF BIOCHEMISTRY

1ST B.Sc SEMESTER –II, PAPER-II

ANALYTICAL TECHNIQUES

MODEL QUESTION PAPER

CODE: BCH-II

TIME:3hrs.

MARKS:75

SECTION-A

I. Write essay Questions

1) a) Methods of Tissue Homogenization?

(OR)

b) Principle and Applications of Ultracentrifugation?

2) a) Principle and Applications of Chromatography techniques ?

(OR)

b) Write the Gel Filtration Chromatography?

3) a) Write the U.V. Visible Spectrophotometer?

(OR)

b) Write about the tracer techniques?

4) a) Write about the electrophoresis & Classifications?

(OR)

b) Write the Gel Electrophoresis.

5) a) Basic Principle of light Microscopes ?

(OR)

b) Fluorescent microscope & Applications?

SECTIONS-B

II. Write short Answers

5x5=25

Answer any five of the following

- 1) Write the mechanical Blender?
- 2) Density gradient?
- 3) RF values & Applications?
- 4) Affinity Chromatography?
- 5) Write the Beer's –lamberts law?
- 6) Radio Immuno assay (R.A)?
- 7) ISO Electric Focusing?
- 8) Electro Microscope uses?
- 9) Units of Radioactivity?
- 10) Florescent Microscope Applications?

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DEPT. OF BIOCHEMISTRY

IIInd B.Sc SEMESTER –III, PAPER-III

ENZYMOLGY, BIOENERGITICS

INTERMEDIATE METABOLISM

MODEL QUESTION PAPER

CODE: BCH-III

TIME:3hrs.

MARKS:75

SECTION-A

I. Write essay Questions

5X10=50

1) a) Write Classification and nomenclature of enzymes?

(OR)

b) Explain the interaction Between enzyme and substrate theory?

2) a) Write about the High energy compounds with suitable example?

(OR)

b) Write about the mechanism and inhibitions of oxidative phosphorylation?

3) a) Write about the glycolytic pathway with regulation?

(OR)

b) Write the light and dark reaction? C₃ cycle

4) a) Biosynthesis of triglyceral?

(OR)

b) Biosynthesis of Cholesterol?

5) a) Write the General reaction of amino acids?

(OR)

b) Write the urea cycle and its regulations?

SECTIONS-B

II. Write the short Answer is?

5x5=25

Answer any five of the following

- 1) Enzyme Specificity?
- 2) Fundamentals of Enzyme Assays?
- 3) Organization of Electron transport chain?
- 4) Write about the enthalpy and entropy?
- 5) Disorder of carbohydrate metabolism?
- 6) Write the glycogenesis cycle?
- 7) Write the fatty acid oxidation (β-Oxidation)
- 8) Write the ketogenesis?
- 9) Transaminations
- 10) Glycogenic & Latrogenic Amino acids.

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DEPT. OF BIOCHEMISTRY

IIInd B.Sc SEMESTER –IV, PAPER-IV

PHYSIOLOGYNUTRITIONAL & CLINICAL BIOCHEMISTRY

MODEL QUESTION PAPER

CODE: BCH-IV

TIME:3hrs.

MARKS:75

SECTION-A

I. Write essay Questions

5X10=50

Internal Choice

- 1) a) Write essay of Digestion and absorption of carbohydrates?
(OR)
b) Write the Transport of gasy in blood (O₂& Co₂)?
- 2) a)Structure of neuroyo and types & Functions?
(OR)
b) Formation of Urine.
- 3) a) Write essay of classifications of Hormones?
(OR)
b)Write the Glucocorticoids Hormones?
- 4) a)Biological value of Proteins?
(OR)
b) Write the Classifications of fat soluble vit and RDA, source & deficiency dissaroers.
- 5) a) Plasma Protein in health dissesee.
(OR)
b)Write the Renal function test?

SECTIONS-B

II. To Write the short Answer is?

5x5=25

Answer any five of the following

1. Types of Anemia
2. Disorders of Blood coagulations
3. Structure and functions of Neuras?
4. CSF (Cerebra spinal fluid)
5. Unite the Tyroid Hormens?
6. Write about the Insulin Hormonal activity?
7. Balance diet?
8. Write Ascorbic Acids (vit.c)
9. Serum enzymes in liver disscase?
10. Creatininine clearance test?

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DEPT. OF BIOCHEMISTRY

Ind B.Sc SEMESTER –IV, PAPER-V

MICROBIOLOGY & MOLECULAR BIOLOGY & I

MODEL QUESTION PAPER

CODE: BCH-IV

TIME:3hrs.

MARKS:75

SECTION-A

I. Write essay Questions

1) a) Write the classifications of micro organizations? And explain the prokaryotes & Eukaryotes write suitable example?

(OR)

b) Bacterial structure growth curve & kinetics?

2) a) Write the nitrogen cycle?

(OR)

b) Nitrogen fixations in Photosynthetic and Non- Photosynthetic systems?

3) a) Principles and types of fermenters?

(OR)

b) Immobilizations of enzyme Technology?

4) a) Classifications of Immunoglobulins?

(OR)

b) Vaccine and their Classifications?

5) a) Write the DNA Replications?

(OR)

b) Write the Protein synthesis?

SECTIONS-B

II. Write Short Answers

5x5=25

Answer any five of the following

1. Corona virus causing covid-19
2. Mechanism of Glutamines Syntheses?
3. Enzymes in Bioremediation?
4. Antigen – Antibody reactivity?
5. ELISA
6. Write the Genetic code?
7. Polymer chain reactivity (PCR) & Application?
8. Hyper sensitivity?
9. Cloning rectory ?
10. Agglutination?