

**MODEL PAPERS  
MEDICAL LAB  
TECHNICIAN**



**MODEL QUESTION PAPER  
PAPER- I I YEAR  
BIO-CHEMISTRY**

**Time : 3 Hours**

**Max. Marks : 50**

**Section - A**

**Note :** (i) Answer all the Questions

(ii) Each Question carries 2 marks 10 x 2 = 20

1. What are different routes of blood collection?
2. Define the terms : a) Molarity b) Normality
3. What are the normal values of : a) Blood Urea b) Serum creatinine
4. Define corrosives and give examples
5. Mention different methods of blood sugar determination
6. Explain the terms : a) Hypoglycaemia b) Glycosuria
7. What are different types of urine specimens?
8. Define Quantities and Units
9. What is a lab register?
10. Mention Fat soluble Vitamins

**Section - B**

**Note :** (i) Answer any five Questions

(ii) Each Question carries 6 marks 5 x 6 = 30

11. Classify carbohydrates and explain biological importance
12. Write about determination of blood urea
13. Give short notes on :  
a) Purity of chemicals b) Scope of Biochemistry
14. What are different urine specimens? Write about collection of 24 hours urine specimen
15. Classify solutions based on methods of expressing concentration.
16. Name the causatives of lab accidents. Write about prevention, safety and first aid in accidents caused by acids.
17. Classify Vitamins. What are the diseases caused by deficiency of different minerals?
18. Explain the method of determination of urine urea.

# MICROBIOLOGY & PATHOLOGY

## PAPER - II

Time : 3 Hours

Max. Marks : 50

### Section - A

- Note :** (i) Answer all the Questions  
(ii) Each Question carries 2 marks 10 x 2 = 20
1. Define sterilization and Disinfectant
  2. Explain the principle of Fluorescent Microscope
  3. Flagella and Spore.
  4. Robert Koch
  5. Gram staining
  6. What is liquefaction of semen
  7. Mention different varieties of body fluids
  8. What is polyuria and Haematuria
  9. Give examples for Granular leucocytes.
  10. Expand MCV and MCHC

### Section - B

- Note :** (i) Answer any five Questions  
(ii) Each Question carries 6 marks 5 x 6 = 30
11. Mention the varieties of collection blood and explain merits and demerits for one.
  12. Write the importance of Microscopic Examination of Urine.
  13. Explain the physical examination of sputum
  14. Write the importance of Gaseous method of sterilization.
  15. Enrich Media and its importance.
  16. Explain the processing of Microbiology clinical specimen
  17. Maintenance of compound Microscope.

**ANATOMY & PHYSIOLOGY**  
**THEORY - PAPER - III**  
**MODEL QUESTION PAPER**  
**1<sup>st</sup> YEAR MLT VOCATIONAL**

**Time : 3 hours**

**Max.Marks : 50**

**Section - A**

**Note :** (i) Answer all the Questions 10 x 2 = 20

(ii) Each Question carries 2 marks

1. Define Anatomy & Physiology
2. Mention the varieties of tissues in our body.
3. Write the functions of saliva.
4. What is Dextro Cardia.
5. List the Proximal Row Carpal Bones
6. What is Meninges
7. What are the Exocrine Glands.
8. Write the surfaces of kidney.
9. Mention the parts of Fallopian Tubes.
10. Write names of the following Nerves & arteries
  - a) 7th Cranial nerve
  - b) 4th cranial Nerve
  - c) Blood supply to liver
  - d) Heart

**Section - B**

**Note :** (i) Answer any five Questions 5 x 6 = 30

(ii) Each Question carries 6 marks

11. Draw the Neat and Labelled diagram of heart and explain coronary circulation.
12. Write the classification of Bones with examples and mention the functions of Bones
13. Define organ write the organs present in Respiratory system and explain one in detail.

14. Draw the diagram of Skin and write the functions of skin.
15. Draw the labelled structure of stomach and explain the functions of liver.
16. Write the composition of blood and functions of blood.
17. a) List the Endocrine glands.  
b) Write short notes on
  - 1) Uterus
  - b) Tonsils
  - c) Appendix

**MODEL QUESTION PAPER  
THEORY IIND YEAR (MLT)  
BIO - CHEMISTRY**

**Time : 3 hours**

**Max.Marks : 50**

**Section - A**

**Note :** (i) Answer all the Questions 10 x 2 = 20  
(ii) Each Question carries 2 marks

1. What are transaminases? Give examples.
2. Write the clinical application of chromatography and electrophoresis.
3. Name different hormones assayed by RIA.
4. Write the principle of Flomphotometry.
5. Define a) Glycolysis b) Urea cycle
6. Mention various clearance tests done to asses renal functioning.
7. Give the principle of vanden bergh test.
8. What is quality assurance? Explain internal quality control.
9. Mention Lipioprofile tests.
10. What are different types of autoanalyers, used in a biochemical laboratory.

**Section - B**

**Note :** (i) Answer five Questions  
(ii) Each Question carries 6 marks 5 x 6 = 30

11. Write about determination of Glycosy lated haemoglobin and its clinical importance.
12. Write the mechanism of enzyme action. How do you classify enzymes?
13. Explain abnormal bilirubin metabolosm.
14. List out various gestic functiona tests. Write about tubeless gartric analysis.

15. How do you determine serum amylase? Give the principle, requirements and methods.
16. Discuss about automation in a biochemical laboratory.
17. Define primary standard and secondary standard classify different titrimetric methods.
18. Explain basic principles of immuno chemical reaction. Write about RIA of T<sub>4</sub>.



# MICROBIOLOGY - II

Time : 3 hours

Max.Marks : 50

## Section - A

**Note :** (i) Answer all the Questions 10 x 2 = 20  
(ii) Each Question carries 2 marks

1. Explain ELISA & RIA
2. Causative Organism for Cholera and Diptheria.
3. Antigen and Antibody
4. Vaccines importance
5. Euthensia-explain
6. Common Lab Animals
7. Define Immunity
8. Principle of stock culture
9. Morphology of Gonococi
10. Importance of Mycology

## Section - B

**Note :** (i) Answer five Questions  
(ii) Each Question carries 6 marks 5 x 6 = 30

11. Write Morphology and lab diagnosis of E. Histolytica.
12. Antitibiotic sensitivity Test
13. Explain the layout of Animal House
14. Write about Disposal of Animal Waste
15. Importance and classification of Vaccines.
16. Food-Bacteriological importance.
17. Write Short Notes on
  - 1) Candidasis
  - 2) Pencillin
  - 3) Actinomyes

# PATHOLOGY

## IIInd YEAR

Time : 3 hours

Max.Marks : 50

### Section - A

**Note :** (i) Answer all the Questions 10 x 2 = 20  
(ii) Each Question carries 2 marks

1. Mention specimen collection site for Bone Marrow Examination.
2. Expand PAS and APTT
3. Write the principle for sickle cell preparation.
4. What are the Methods of estimation of Bleeding time.
5. Define Autopsy
6. Write the varieties of Microtomes
7. Explain the character of Blood Donar.
8. What is Regressive stain
9. What is Mordant
10. Composition of Leishman stain

### Section - B

**Note :** (i) Answer five Questions  
(ii) Each Question carries 6 marks 5 x 6 = 30

11. Automatic tissue processing, explain.
12. Blood grouping procedure and its importance.
13. Identification of Microfilaria
14. Write the Principle and clinical significance of sickle cell preparation.
15. Explain - preservation of specimen
16. Coumb test - direct method, explain.
17. Write the Identical features feather of Microfilaria.

# LIST OF SUBJECT COMMITTEE MEMBERS OF PARAMEDICAL COURSES

## I. Medical Lab Technician

1. Dr. Aruna Raja Kumari : Retired Professor,  
Gandhi Medical College,  
Secunderabad
2. Dr. Durga K. : Associate Professor,  
Department of Pathology,  
Gandhi Medical College,  
Secunderabad.
3. Dr. Sreelatha. S. : Profssor, Department of Anatomy
4. Mr. Srinivas : Vocational Juniorj Lecturer,  
A.S.R. Junior Colelge,  
Shantinagar
5. Dr. Jaya Kumar K.P. : Vocational Junior Lecturer,  
B.S.S.K. GJC., Chittoor
6. Smt. A.M.Sandhya Rani : Co-ordinator  
Reader SIVE % CIE