



Jharkhand State Paramedical Council

RIMS Campus, Bariatu, RANCHI 834009

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SYLLABUS OF DIPLOMA IN MED. LAB. TECHNICIAN

PAPER -I (PART- A)

[BASIC MEDICAL SCIENCES]

Must develop some skills and learn common medical terminology-

Hospital awareness -

General patient care-

- Patients caring (Knowledge of nursing of patient)
- Vital signs.
- Admission discharge procedure
- Maintenance of records.
- There should be exposure to patient care.
- Development of Ethical values and overall professional sense.

Computer awareness -

Computer basics- MS Word/ MS Excel/MS PowerPoint

Internet- Browsing/ Downloading/ Uploading

1. **General Foundation course**

- Health Disease and Environment.
- Health care delivery system.
- Hospital organization
- Patient related services.
- Registration OPD & IPD

2. **Basic Human Science**

- Human Anatomy -
- Physiology -
- Bio Chemistry - (Knowledge of different organs with their functions)
- Pathology
- Pharmacology

PAPER -I (PART-B)

1. Medical Terminology in Pathology
2. Instruments - Microscope /Colorimeter / Spectrophotometer/ Balance/ Fridge
3. Units of measurement
4. Solutions
5. Specimens and methods of collection

Basics of Lab principles & Procedures

- Responsibilities of Lab worker Lab accidents Lab safety First aid
- Automation in Pathology- Analyzers/ Histopathology

Blood in detail

Other body fluids



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SYLLABUS OF DIPLOMA IN MED. LAB. TECHNICIAN **THEORY PAPER -II (PART-A)**

1. Hematology & Blood

- Introduction to Haematology.
- Specimen Collection and Laboratory Preparation in Haematology
- Routine Haematological Tests
- Special Haematological Tests.
- Interpretation of Laboratory Finding in Haematology.
- Introduction of Haemostasis and Coagulation.
- Laboratory Investigation of *Bleeding Disorders*.

2. Immunohaematology & Blood Banking.

- Principles of Immunohaematology and Clinical Significance of Blood Transfusion.
- Collection and Processing of Blood for Transfusion.
- Routing Laboratory Procedures in Blood Bank.
- Transfusion Reaction and Haemolytic Disease of the Newborn.

3. Clinical Pathology

- Urine Analysis
- Laboratory Examination of the Miscellaneous Body Fluids.
- Semen Analysis
- Stool Examination

4. Histology and Cytology

- Introduction of Histo-technology and Cyto-technology.
- Laboratory Techniques in Histology.
- Laboratory Techniques in Diagnostic Exfoliative Cytology

THEORY PAPER-II (PART-B)

1. Microbiology

- Introduction to Diagnostic Microbiology & Microbiological Techniques.
- Diagnostic Bacteriology.
- Laboratory Diagnosis of mycotic Infection.
- Laboratory Diagnosis of Parasitic infection.

2. Serology

- Introduction and Procedures.
- Laboratory procedures in serology.

3. Clinical Biochemistry

- Normal and Abnormal Biochemical Processes of the Body.
- Specimen Processing for Biochemical Analysis.
- Principles of the Analytic Techniques
- Automation in Clinical Biochemistry Laboratory.
- Routine Biochemical Tests.
- Biochemical Tests Profile.
- Toxicological Investigation and Therapeutic Drug Monitoring.