

SCL PARAMEDICAL COUNCIL OF INDIA

(Diploma in Medical Laboratory Technology)

Course duration 2 years +6 month internship

Eligibility

* Interested candidate must have passed 10+2 with physics chemistry biology or math with 40% marks by state board or any recognized board/ university.

First year 1st Paper

Anatomy & Physiology

a. Anatomy-Grass Anatomy of the following:

1. Human body & anatomical terms & cell structure.
2. **Muscular**-skeleton systems, skull, vertebral column, pelvic bones, extremities, rib cage.
3. **Respiratory systems**- nose, larynx, trachea, lungs and thoracic cavity.
4. **Cardio-vascular system**-Heart, major arteries & veins, renal & portal system.
5. **Alimentary system**- mouth, pharynx, esophagus, stomach, small intestine & large intestine, spleen, liver, gall bladder, pancreas.
6. Brain, spinal cord, menigeal coverings.
7. **Sensory organs**- skin, eyes, ears, tongue, nose.
8. **Urinary system**-kidney, urethra, urinary bladder-urethra.
9. Reproductive system- male & female.

b. Physiology- Grass physiology of the following system:

1. G.I.T system
2. **Urinary system**- kidney, formation of urine and role in electrolyte balance.
3. **Muscular system**- structure & function of cardiac muscles, skeletal muscle, involuntary muscles.
4. **Cardio Vascular system**-cardiac output, circulatory system, BP.
5. **Respiratory system**- Pulmonary system, exchange of gases, airway resistance.
6. **Central nervous system**- conduction of nerve impulse, peripheral, peripheral and automatic nervous system.
7. **Endocrine glands**- broad idea about metabolic processes, fluid and electrolyte balance, pituitary, thyroid, parathyroid and adrenal gland.
8. Maternal and neonatal physiology.

9. **Organs of special senses**-skin, ear, eye, tongue & nose.

10. Pressure loss due to abrupt change in bore of tube, principal of flow meters and its types Bernoulli Principle & its application.

2nd paper (Microbiology)

1. General Bacteriology
2. Systemic Bacteriology
3. Immunology & Serology
4. Clinical Bacteriology

3rd paper (biochemistry)

4th paper (Pathology)

1. Clinical Pathology
2. Hematology

2nd year (1st paper) Biochemistry

2nd paper (microbiology)

1. Immunology & Serology
2. Mycology
3. Animal Care
4. Clinical Microbiology
5. virology

3rd paper (pathology)

1. Histopathology
2. Cytopathology
3. Blood Banking

4th paper

Social & Preventive Medicine

1. Preventive & Social medicine
2. Health
3. Disease
4. Hygiene
5. Environment & health
6. Water
7. Air
8. Ventilation
9. Waste management
10. Village sanitation
11. Nutrition & health
12. Balanced diet

13. Epidemiology
14. Principles of disease control & preventive
15. Family planning
16. Communicable diseases
17. Personal hygiene
18. Maternal & child health
19. School health services