

SYLLABUS OF BCG TECHNICIAN IN MCD

General Anatomy, Physiology (Cytology, Histology, Osteology & Basic of all organ system)

1. General orientation about part of human body, various term used in anatomy total numbers of bone their name and location. Basic idea about organization of body from cell to organ system.
2. Structure of animal cell, cell organ and their function.
3. Human tissue, type, structure, infection.
4. Osteology – Name, location, identification & basic detail of all bones.
5. Joint – Definition, type, basic structure & example.
6. Skin & appendages.
7. GIT – Location, Gross structure various parts & their function. Detail of process of food ingestion, digestion, absorption & defecation (Microscopic structure not required)
8. Respiration tract – Location, Gross structure various parts & their function detail of breathing mechanism different respiratory volume.
9. Urinary Tract – Location, Gross structure, various parts & their function, process of urine formation & voiding.
10. Male Reproductive System – Only gross structure & function of different part.
11. Female reproductive system – Only gross structure & function of different part, menstrual cycle (Microscopic structure not required).
12. Endocrine system – Hormones secreted by pituitary, thyroid, parathyroid, pancreas, adrenal cortex, adrenal medulla, gonads & function of different hormones.
13. Gross structure of brain & spinal cord, function of different part of brain & spinal cord.
14. Blood – definition, composition & function detail about plasma, RBCs, WBCs, Platelets, Clotting system. Blood smear, estimation of HB.
15. Gross structure & function of sensory organs Eye, Ear, Nose, Tongue (Detail not required).
16. Basic structure of heart, vessels open in to heart & leaving the heart arterial and venous tree of body.
17. Lymphatic system – Structure & function.
18. Immune system – Components various mechanism of defense.

Basic of Biochemistry

1. Introduction of Biochemistry.
2. Fat.
3. Protein.
4. Carbohydrate
5. Enzyme.
6. Minerals.
7. Vitamins

Tuberculosis

1. Definition (Introduction of disease).
2. Incubation Period.
3. Etiology.
4. Pathogenesis.
5. Clinical feature.

Demography & Epidemiology of Tuberculosis

1. Demography and Epidemiology of Tuberculosis
2. Problem Statement – India, World.
3. Epidemiological Indices of Tuberculosis.

Natural History of tuberculosis

- Natural History of tuberculosis.

Basic of relevant pathology

1. Inflammation – Definition, Cardinal sign., Basic steps of Acute & chronic inflammation.
2. Basic of shock.
3. Basic of disorder of immune system.
4. Mode of disease transmission and prevention of infection.
5. Sterilization and method of sterilization in hospital.

Bacteria

1. Introduction (Bacteria, Virus and Fungi)
2. Bacterial cell.
3. Classification of bacteria.

Immunization

1. Immunization.
2. Immunization schedule.
3. Routes of vaccine administration
4. Adverse event
5. Record of vaccination.
6. Handling of Biomedical waste.

National Program & Policies

1. National Programme & Policies on Tuberculosis control.
2. DTP.
3. RNTCP.
4. DOTs.
5. Lab Network

B.C.G. Vaccine

1. Introduction (B.C.G. Vaccine)
2. Storage of B.C.G. Vaccine.
3. Handling.
4. Mode of Administration of B.C.G. Vaccine.

Route of administration of injection

1. Intramuscular Route of Injection.
2. Intravenous Route of Injection.
3. Subcutaneous Route of Injection.

Tuberculosis

1. Diagnosis of Tuberculosis: Sputum examination/ slide formation, Tuberculin test, Radiological examination.
2. Management of tuberculosis: Preventive, curative.
3. Prognosis & complication of tuberculosis : Pulmonary tuberculosis, Pleural effusion, Abdominal tuberculosis, Tubercular meningitis, MDR, Tubercular pericarditis, Tubercular sclerosis, Necrosis, Bone & Joint Tuberculosis, Skin Tuberculosis.

HIV & Tuberculosis coordination

- HIV & Tuberculosis coordination.