

Detailed Syllabus for the post of E.C.G TECHNICIAN
(Government Homoeopathic Medical Colleges) - Direct Recruitment
(Cat.No: 259/2022)

MODULE 1- 5 marks

Human Anatomy Overview

- Anatomy and physiology definition
- Anatomical terms
- Structure of cell and its function

MODULE 2—3 marks

Skeletal System

- Overview of human skeleton
- Thoracic cage, Ribs, Sternum, Vertebrae, Mediastinum

MODULE 3 - 2 marks

Bioelectricity

- Different phases of electrical activities of cell and generation of ECG wave forms

MODULE 4- 25 marks

Cardiovascular system

- Position of heart
- Layers of heart
- Cardiac Muscles
- Chambers of heart and associated blood vessels
- Valves of heart
- Circulation of blood
- Coronary arteries
- Conduction system of heart
- Cardiac cycle
- Heart sound
- Stroke volume, Cardiac Output
- Blood Pressure and its measurement

MODULE 5 -5 marks

Common Heart Diseases- Basics

- Coronary heart diseases
- Cardiac Arrhythmias
- Valvular Heart diseases
- Abnormalities in Cardiac position

MODULE 6- 25 marks

Basics of Electrocardiography

- Basic Principle of ECG
- Lead System
- Standardization
- Damping
- ECG paper
- ECG machine
- Procedure of ECG recording
- Electrodes used for ECG recording
- Normal ECG waveform
- Parameters of ECG
- Artifacts in ECG
- Common ECG abnormalities
- Role of ECG Technician

MODULE 7 -15 marks

Basics of other Cardiovascular measurement techniques

Procedure and uses of

- Threadmill Test
- Holter Monitor
- Cardiac Monitor
- Echocardiograph
- Cardiac Catheterization
- Defibrillator

- Pacemaker

MODULE 8 – 5 marks

Cardiopulmonary resuscitation

- Basic Life Support
- Advanced Life Support

MODULE 9- 10 marks

Screening of heart diseases

- Risk factors of heart disease and its management
- Body Mass Index and its calculation

MODULE 10 – 5 marks

Basics of Audiology

- Basic anatomy and physiology of ear
- Types of hearing loss
- Pure Tone audiometry
- Audiogram

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.

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