## RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

# SYLLABUS OF SCREENING TEST FOR THE POST OF ASSISTANT PROFESSOR – ANATOMY MEDICAL & HEALTH (C.B.) DEPARTMENT

A **General Anatomy**: Basic knowledge of cell biology & cell cycle mitosis, meiosis, cell renewal, cellular differentiation and proliferation. Details of tissues of the body: viz skin, muscle, nerve, cartilage, bone & joints, loose and dense connective tissue and all types of glands including endocrine.

## B Gross Anatomy:

- 1. Extremities: A gross study of muscles: blood vessels, nerves and bones and joints
- 2. Thorax: Study of gross anatomy of chest wall, Mediastinum and its contents, Pericardium, Heart & Great vessels, Pleura, Lungs & Diaphragm, Mechanism of respiration and its Applied consideration.
- Abdomen: Abdominal wall, Abdominal cavity- its contents organs, vessels, nerves and lymphatics with its applied importance. Perineum and Pelvis its contents and applied considerations (In both sexes).
- 4 Head and Neck: Study of Skull ,Face & Scalp, Temporal & Infratemporal region, Neck & its deep structures, Submandibular & Parotid region, Blood vessels, Cranial nerves, Orbit & its contents, Nose & Paranasal sinuses, Pterygopalatine fossa, Oral cavity, Pharynx ,Larynx , Ear ,auditory & vestibular apparatus.
- Central nervous system: Spinal cord Tracts, Medulla oblongata, Pons, Cerebellum, Midbrain and its internal structure, functional significance and connections. Third, Fourth and Lateral ventricles. Forebrain Internal structure functional significance and connections. Choroid plexus, Covering and Blood Supply of brain & spinal cord. Cranial nerves, tracts, Pyramidal and extra Pyramidal system.
- 6 Autonomic nervous system: Parasympathetic and sympathetic system.
- 7 Ductless Glands: Gross anatomy of all the ductless glands.

## C HISTOLOGY

- 1 Principles of various types of microscopes
- 2 General and Systemic histology of all cells, tissues and organs of the body.

#### D EMBRYOLOGY

- General embryology-Spermatogenesis and Oogenesis, Heredity and Human Genetics, Fertilisation and Segmentation of ovum Foetal membranes and Placenta.
- 2 Development of individual systems and their anomalies.

#### E APPLIED ANATOMY

Anatomy as applied to surgery, medicine obstetrics and gynaecology, ophthalmology and other specialized disciplines of medical science.

#### F FUNCTIONAL ANATOMY

Relationship of structure and function in respect of various tissues and organs of the body.

## G LIVING ANATOMY (Surface Anatomy)

#### H PRINCIPLES OF GENETICS (At both cellular and molecular level)

Including structure and significance of chromosomes, influence of heredity and environment on development, mechanism of inheritance of some common hereditary disorders.

#### I RADIOLOGICAL ANATOMY

The principles of various imaging techniques and interpretation.

## J COMPARATIVE ANATOMY AND EVALUATION

Basic knowledge.

## **K** BODY PRESERVATION (Embalming and Plastination)

## L LEGAL ASPECTS OF ORGAN AND BODY DONATION (Anatomical Act)

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Pattern of Question Papers:

- 1. Objective Type Paper
- 2. Maximum Marks: 100
- 3. Number of Questions: 100
- 4. Duration of Paper: Two Hours
- 5. All Questions carry equal marks
- 6. There will be Negative Marking

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