

# ANATOMY

## A. Subject Aims:

1. To acquaint the students with the brief history of anatomy, genesis of the nomenclature, various methodologies employed in the teaching of the subject of anatomy as a whole.
1. To impart knowledge of the gross and developmental anatomy of the parts of the body, correlate the relationship of the various structures.
2. To teach normal microscopic anatomy of various structures of the body.
3. To teach topographic anatomy and clinical anatomy of those parts of the body which he will encounter during his para-clinical and clinical studies.
4. Proceed to undergo higher studies.

## B. Subject Objectives:

At the end of the courses of the various aspects of anatomy, the students should be able to-

1. Understand and appreciate the other subjects taught in the pre-clinical and also in para-clinical and clinical courses.
2. Learn the regional anatomy in order to interpret and understand the genesis of various clinical conditions.

## C. Course composition and teaching hours:

The teaching of anatomy is spread over the first year & second year of B.H.M.S course.

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|---------------------------------------------------|------------|
| 1. Theoretical lectures.....                      | 140 hours. |
| 2. Demonstrations.....                            | 90 hours.  |
| 3. Histology practical (microscopic anatomy)..... | 74 hours.  |

4. Dissection of the entire cadaver and regular evaluation through card system..... 84 hours.
  5. Topographic (surface anatomy) and clinical anatomy. ... 12 hours.
- 400 hours.

**Note:**

Dissection of a part should proceed simultaneously with demonstration classes and lectures. During first year, abdomen with pelvis, thorax and inferior extremity be covered and the rest during second year.

Dissections of different part of the cadaver are to be conducted as per the card supplied as far as possible.

**D. Evaluation in the First professional BHMS Examination:**

Theory (MCQ25%+SAQ 75%) = 200 marks.

Practical = 100 marks.

( Hard parts- spotting, bone- 25; surface marking- 5; histology (slide)-10; practical note book-10;

Soft parts- spotting-30; dissection- 20 = 100 marks.)

Viva - (soft part- 50; osteology & histology- 50) -

= 100 marks.  
**400 marks.**

# **ANATOMY**

## **Paper -I**

**Hom - 103A**

### **Detailed Course Contents:**

**1. Definition and branches of anatomy.**

**2. Description of the terms in details:**

Anatomical position median plane, transpyloric plane, intertubercular plane, midinguinal plane, sagittal suture, sagittal plane, coronal suture, anterior & posterior, dorsal & ventral, superior & inferior proximal & distal, superficial and deep, planter and palmer.

**3. The systems and cavities of the body:**

The cranial cavity, the thoracic cavity, the abdominal cavity, the pelvic cavity and their contents.

**4. Histology:**

The cells and tissues of the body. Cell structure, Reproduction of cells, Classification of tissues, Epithelial tissues, Connective tissue.

**5. Osteology:**

Morphology of human skeleton. Divisions of skeleton. Bones of the skull. Bones of the vertebral column. Ribs and sternum. Appendicular skeleton, bones of the upper limb and lower limb.

**6. Arthrology:**

Classification of joints. Movements of the joints, General description with functions of the following joints: Hip joint, Knee joint, Ankle joint, Shoulder joint, Elbow joint, Wrist joint, Inter-vertebral joint.

**7. Myology:**

Muscular tissue, Skeletal muscle, Cardiac and smooth muscles. Origin, insertion, nerve supply and action of the following muscles:

- (i) muscles of mastication,
- (ii) prominent muscles of the trunk,
- (iii) prominent muscles of the upper limb,
- (iv) prominent muscles of the lower limb,
- (v) diaphragm.

#### **8. Embryology:**

Introduction and fundamental knowledge of the embryonic development of foetus.

## **ANATOMY**

### **Paper -II**

### **Hom - 103B**

#### **Detailed Course Contents**

#### **9. Angiology:**

- (i) Vascular structure and types of blood vessels.
- (ii) Heart: Position of the heart in thoracic cavity, Pericardium and Structure of the heart. (iii) Arch of aorta. Thoracic aorta, abdominal aorta. Pulmonary trunk with branches.
- (iv) Arteries of head and neck. Arteries of the upper limb. Arteries of the lower limb,
- (v) Superior and Inferior venacava. Pulmonary veins, Portal veins with its tributaries.
- (vi) Lymphatics: Regional lymph node, and vessels. Thoracic duct, Spleen.

#### **10. Alimentary System:**

The organs of the digestive system:

- (i) Organs of oral cavity: Teeth, Tongue. Salivary glands, Pharynx.

- (ii) Gastrointestinal tract: Oesophagus, Stomach, Small intestine, Large intestine, Liver, Gall bladder, Pancreas. Peritoneum.

- (iii) Regions of abdomen,

#### **11. Respiratory system:**

Nose and nasal cavity, Larynx, Trachea, Bronchi, Bronchioles Lungs, Pleura, Mediastinum.

#### **12. Urogenital system:**

- (i) Urinary tract: Kidneys, Ureters, Bladder, Urethra;

- (ii) Male genital organs: Scrotum, Testes, Vas deferens, Spermatic cord, Seminal vesicles, Prostate gland and Penis;

- (iii) Female genital organs: (a) External genitalia (vulva), Perineum;

- (b) Internal genital organs: Vagina, Ovary; Fallopian Tubes and Uterus.

- (c) Breasts.

#### **13. Nervous System:**

- (i) Nervous tissue: Neurons, Synapse, Neuralgia.

- (ii) Classification of nervous system:

- (a) Central nervous system: Brain, Spinal cord, Meninges;

- (b) Peripheral nervous system: Cranial nerves, Spinal nerves, Autonomic nervous system.

#### **14. Organs of special senses:**

- (i) Olfactory apparatus: the nose;

- (ii) Visual apparatus: the eye;

- (iii) Auditory and vestibular apparatus: the ear;

- (iv) Integuments: the skin.

#### **15. The endocrine system:**

Pituitary gland, thyroid gland, parathyroid gland, adrenal gland, Islets of Langerhans and thymus gland.

## **PRACTICAL**

**Demonstration:** Human skeleton: Bones of skull. Bones of vertebral column, Ribs and sternum, Bone of extremities.

.Viscera- Brain, Heart, Lungs, Liver, Stomach, Intestine, Spleen, Kidney, Sexual organs.

**Dissection:** Dissection should be done according to the Item Card. Item Card must be signed by the respective teacher and submitted during examinations for evaluation by the examiners

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## **PRACTICAL NOTE BOOK**

The practical note book must be submitted along with the progress card during examinations for evaluation by the examiners.