1.1.2 SYLLABUS (Including Teaching Hours)

- 1. General Anatomy: Anatomical terms, planes, brief outline of different systems of body.
- 2. Regional anatomy of head and neck with osteology of bones of head and neck with emphasis on topics of dental and maxillofacial importance
- 3. General disposition of thoracic ,abdominal and pelvic organs
- 4. Clinical anatomy: sites of intramuscular injections, intravascular injections, lumbar puncture
- 5. General Embryology and systemic embryology with reference to development of head and neck
- 6. Histology of basic tissues, head and neck structures and alimentary, respiratory, excretory systems, endocrine glands and gonads.
- 7. Medical genetics

I) MUST KNOW 80HRS

1) General Anatomy:

- A. Anatomical terms
- B. Skin, superficial fascia and deep fascia
- C. Cardiovascular system, portal system, collateral circulation, arteries
- D. Lymphatic system including lymphatic organs, and regional drainage
- E. Skletal system: classification of bones, ossification and growth of bones.
- F. Muscular system: classification of muscles.
- G. Arthrology: classification of joints
- H. Nervous system: Central, peripheral and autonomic nervous system.

2) Head and Neck:

- A. Scalp, face, temple, lacrimal apparatus
- B. Neck: Deep facia of neck, facial neck spaces, triangles of neck, deep structures in the neck
- C. Cranial cavity: meninges, dural folds, dural venous sinuses, parts of brain, ventricles, cranial nerves attached to brain, pituitary gland
- D. Cranial nerves III,IV,V,VI,VII,IX, XII in detail.
- E. Orbital cavity- bony orbit, ocular muscles, supports of eye ball, nerves and vessels of Orbit
- F. Parotid gland
- G. Infratemporal fossa, pterygo palatine fossa, muscles of mastication, temporomandibular joint
- H. Nasal cavity
- I. Paranasal sinuses
- J. Oral cavity- tongue, soft and hard palate
- K. Pharynx, palatine tonsil, auditory tube, Larynx
- L. Osteology: adult skull, external features and interior of skull, individual skull bones, hyoid bones and cervical vertebrae.

3) Thorax:

- A. Thoracic wall
- B. Pleural cavity and pleura
- C. Mediastinum
- D. Lungs: surfaces, relations, blood supply and bronchopulmonary segments
- E. Heart: pericardium, external features, chambers, and blood supply
- F. Diaphragm

4) Clinical Procedures with anatomical background:

- A. Intra muscular injections: Demonstrations on dissected person Deltoid- relation to axillary nerve Gluteus maximus- relation to sciatic nerve
- B. Intravenous injections and Venesection:

Demonstration of veins in dissected specimen and on a living person:

- 1. Median cubital vein
- 2. Cephalic vein
- 3. Basilic vein
- 4. Long sephanous vein
- C. Arterial Pulsations in dissected bodies and on a living person:
 - 1. Superficial temporal
 - 2. Facial
 - 3. Carotid
 - 4. Axillary
 - 5. Brachial
 - 6. Radial
 - 7. Ulnar
 - 8. Femoral
 - 9. Polpiteal
 - 10. Dorsalis pedis
- D. Lumbar Puncture : demonstration on a dissected specimen of spinal cord , cauda equina and at intervertebral space between L4 and L5.

5) Embryology:

- A. Gametogenesis- male and female
- B. Fertilization
- C. Placenta
- D. Primitive streak
- E. Nurulation and neural crest
- F. Bilaminar and triloaminar embryo
- G. Formation and fate of intraembryonic mesoderm
- H. Formation and fate of notchord
- I. Pharyngeal arches clefts and pouches derivatives
- J. Development of face, palate, tongue.
- K. Development of thyroid, pituitary, salivary glands
- L. Relevant developmental anomalies
- M. Development of tooth

6) Histology:

- A Cell
- B. Basic tissues: Epithelium, Muscle, Connective tissue and nervous tissue
- C. Nervous tissue: peripheral nerve, optic neve, sensory ganglion, autonomic ganglion,
- D. Skin
- E. Lymphatic tissue,
- F. Glands: Classification, salivary glands
- G. Blood vessels, tongue, lip, tooth, soft palate, epiglottis, thyroid gland, parathyroid gland, pituitary gland

7) Medical genetics:

- A. Mitosis and Meiosis
- B. Chromosome structure and classification
- C. Gene structure
- D. Numerical and structural abnormalities

E. Pattern of inheritance

II) DESIRABLE TO KNOW: 20 HRS

Internal capsule, blood supply of brain, circle of Willis, Ventricles, corpus callosum

Imaging modalities, X ray skull, Paranasal sinuses, CT scan and MRI of skull, orthophantamograph of mandible

Mechanism of thorax

Abdominal organs and pelvic organs

Peritoneal cavity

Angiography and imaging of coronary vessels.

Brief osteology of femur, muscles of arm.

Brief ostrology of bones of gluteal region, gluteal muscles and structures under cover of gluteus maximus.

Brief study of anatomical landmarks with reference to peripheral pulsations.

Brief study of anatomical landmarks of back.

GIT

Kidney, ureter, urinary bladder, ovary and testes.

Mendelian laws. Gene mapping, Microdeletions and dental anomalies.

1.1.3 EXAMINATION PATTERN

Name of the exercise	Time Allotted	Marks Allotted
Identification of organs & slides	1.15 minutes	80
Journal	N.A	10