M.S. ANATOMY

I. Outline of the course contents

Theory

1. History of Anatomy
2. General Anatomy
3. Elements of Anatomy
4. Gross Human Anatomy including Cross Sectional Anatomy and Applied Anatomy.
5. Principles of Microscopy and Histological techniques.
6. General and Systemic Histology.
7. General and Systemic Embryology including Growth, Development and Teratology.
8. Neuroanatomy.
9. Surface Anatomy.
10. Radiological Anatomy including Principles of newer techniques and Interpretation of CT scan, Sonography and MRI.
11. Human genetics.
12. Comparative Anatomy.
13. Principles of Physical Anthropology.
14. Museum techniques, Embalming techniques including Medicolegal aspects, and knowledge of Anatomy Act.
15. Medical ethics.
16. Recent Advances in Anatomy.

Practical Schedule

1. During the course – the PG students should dissect the entire human cadaver.
2. They should embalm and maintain the record of embalming work done.
3. They should prepare and mount at least 5 museum specimens during their course.
4. In Histology section

- Collection of tissues, fixing, block making, section cutting; use of different types of microtomes and preparation of general and systemic slides.
- Heamatoxylin& Eosin-

  (i) Preparation of stains.
  (ii) Staining techniques.

- Knowledge of special staining techniques like Silver Nitrate, PAS staining, Osmium tetroxide, Van Gieson etc.
- Embryo (chick embryo) mounting and serial sections of embryo – should be taken, stained with Haematoxylin & Eosin.
- Knowledge of light microscope and electron microscope.
- Detailed microscopic study of all the tissues (General and Systemic Slides).

II. Method of training

- The Postgraduate students shall attend all the Undergraduate Theory and Practical Classes regularly.
- They shall take part in teaching undergraduate students in gross anatomy, histology tutorials, group discussions and seminars.
- Rotation postings of PG students shall be made during the II and III years of the course as follows.

1. General Surgery:	4 weeks
2. Orthopaedics:	2 weeks II year
3. Radiodiagnosis:	2 weeks
4. General Medicine:	2 weeks
5. Paediatrics:	2 weeks
6. Obstetrics and Gynaecology:	2 weeks III year
7. Genetics:	2 weeks

At the end of the posting, a certificate has to be obtained from the concerned heads of the departments for satisfactory learning.

III. Seminars & Journal Review Meeting

The postgraduate students should actively participate in departmental seminars and journal reviews. A record showing the involvement of the student in the form of a diary shall be maintained. Seminars & Journal review meeting may be conducted alternately once in every 15 days.

III. Maintenance of Record of Work done.

1. A diary showing each days work has to be maintained by the candidate, which shall be submitted to the head of the department for scrutiny on the first working day of each month.
2. A practical record of the work done in Histology and Gross Anatomy with an emphasis on Cross sectional Anatomy has to be maintained by the candidate and duly scrutinized and certified by the head of the department and to be submitted to the external examiner during the final examination.
3. A list of the Seminars and Journal clubs attended and participated by the student has to be maintained. This should be scrutinized by the head of the department.

III. Periodical Assessment and Progress Report.

The post graduate students have to be assessed periodically by conducting written, practical and viva voce examination at the end of every year. The assessment should also be based on the participation in seminars, journal review and the performance in the teaching and use of teaching aids and progress in dissertation work.

The assessment will be done by all the recognized P.G teachers of the department and the progress record should be maintained by the head of the department.

III. Dissertation work

During the course of study every candidate has to prepare a dissertation individually, on a selected topic under the direct guidance and supervision of a recognized postgraduate teacher as per MCI and KUHS regulations.

The suggested time schedule for dissertation work is:

1. Preparation work for dissertation synopsis including pilot study and submission of the synopsis to the University within 6 months from the commencement of course or as per the dates notified by the University from time to time.

2. Data collection for dissertation and writing the dissertation.

3. The candidates shall report the progress of the dissertation work to the concerned guide periodically and obtain clearance for the continuation of the dissertation work.

4. Submission of the dissertation six months prior to the final examination or as per the dates notified by the university from time to time.

Registration of dissertation topic:

Every candidate shall submit a synopsis in the prescribed proforma for registration of dissertation topic by the University after it is scrutinized by the PG training cum Research Committee of the concerned institution. The synopsis shall be sent to within the first 6 months from the commencement of the course or as notified by the university in the calendar of events, to the Registrar (Academic).

Submission of dissertation

The dissertation shall be submitted to the Registrar (Evaluation) of the University six months prior to the final examination or as notified in the calendar of events. **Approval of the dissertation by the panel of examiners is a prerequisite for a candidate to appear for the University examination.**

MONITORING THE LEARNING PROGRESS

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only helps the teachers to evaluate the students, but also gives an opportunity for the students to evaluate themselves. The monitoring shall be done by the staff of the department based on the participation of students in various teaching / learning activities. It may be structured and assessment be done using checklists that assess various aspects. Model Checklists given above may be copied and used.

The learning outcome to be assessed should include:

(i) Personal Attitudes,
(ii) Acquisition of Knowledge,
(iii) Practical and laboratory skills and

(iv) Teaching skills.

*i) **Personal Attitudes.*** The essential items are:

- Caring
- Initiative
- Organizational ability
- Potential to cope with stressful situations and undertake responsibility
- Trustworthiness and reliability
- Understanding and communicating intelligibly with patients and others
- Behaving in a manner which establishes professional relationships with patients and colleagues.
- Ability to work in team
- A critical enquiring approach to the acquisition of knowledge

The methods used mainly consist of observation. It is appreciated that these items require a degree of subjective assessment by the guide, supervisors and peers.

ii) Acquisition of Knowledge:

The methods used comprise of 'Log Book' which records participation in various teaching / learning activities by the students. The number of activities and the presentations are made are to be recorded. The log book should periodically be validated by the supervisors. Some of the activities are listed. The list is not complete. Institutions may include additional activities, if so, desired.

Journal Review Meeting (Journal Club):

The ability to do literature search, in depth study, presentation skills, and use of audio- visual aids are to be assessed. The assessment is made by the faculty members and peers attending the meeting using a checklist (see Model Checklist I,)

Seminars / Symposia: The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study, presentation skills and use of audio- visual aids are to be assessed using a checklist (see Model Checklist-II,)

Clinico-pathological conferences: This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

Medical Audit: Periodic morbidity and mortality meeting be held. Attendance and participation in these must be insisted upon. This may not be included in assessment.

iii) Practical and Laboratory skills

Day to Day work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills (see Model Checklist III,)
Clinical meetings: Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list (see Model checklist IV,).
Procedural skills: The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the guide by direct observation. Particulars are recorded by the student in the log book.

iv) **Teaching skills:** Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department and from feedback from the undergraduate students (See Model checklist

v) **Periodic tests**: In case of degree courses of three years duration, the concerned departments may conduct three tests, two of them be annual tests, one at the end of first year and the other in the second year. The third test may be held three months before the final examination. The tests may include written papers, practicals/clinicals and viva voce. In case of diploma courses of two years duration, the concerned departments may conduct two tests, one of them be at the end of first year and the other in the second year three months before the final Work diary / Log Book- Every candidate shall maintain a work diary and record his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

vi) **Records:** Records, log books and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University or MCI.

Log book

The log book is a record of the important activities of the candidates during his training; Internal assessment should be based on the evaluation of the log book. Collectively, log books are a tool for the evaluation of the training programme of the institution by external agencies. The record includes academic activities as well as the presentations and procedures carried out by the candidate.

Procedure for defaulters: Every department should have a committee to review such situations. The defaulting candidate is counseled by the guide and head of the department. In extreme cases, (if she/he fails to fulfill the requirements in spite of being given adequate chances to set himself or herself right) the departmental committee may recommend withholding the name of the candidate from appearing for the examination.

SYLLABUS FOR THEORY

A Postgraduate should have fairly a good knowledge of all the topics given in the 'Outline of the course contents' above. Therefore, formulating a strict syllabus for the theory and practical examination of medical Postgraduate degree course does not necessarily arise. However, the topics detailed below may be taken as a guide while preparing for the examination.

1. GENERAL ANATOMY

Epithelium: Classification, Simple and Compound epithelium, Glandular and Sensory epithelium.Connective tissue cells and fibres.
Cartilage – Structure &Types
Bone: Types, Periosteum, cells and matrix. Ossification–Vascularization, regeneration.
Joints: General classification with emphasis to structure and types of synovial joint and movements.

2. GENERAL EMBRYOLOGY

Introduction, Oogenesis, Ovarian cycle, Male reproductive system, Spermatogenesis, Fertilization and implantation; Bilaminar and Trilaminar germ discs, Intraembryonic mesoderm, Folding of the embryo, Formation of Placenta, Circulation of placenta, Foetal membrane, Twinning, Teratology.

3. UPPER LIMB

Bones, Fascia, Venous and lymphatic drainage, Cutaneous innervation and myotomes (Motor innervation) of Upper limb; Surface anatomy and the structures in the Pectoral and scapular regions; Mammary gland with special emphasis to its lymphatic drainage; Blood vessels, nerves (Brachial plexus) and lymph nodes in the axilla and their clinical significance; Muscles, blood vessels and nerves of arm, forearm and hand; Cubital fossa, fascia and compartments of palm and their clinical significance; all joints of upper extremity.

4. LOWER LIMB

Bones, Fascia, Venous and lymphatic drainage and their clinical significance, Cutaneous innervation and myotomes (Motor innervation) of Lower limb; Special emphasis to Posture and Gait; Structures in the gluteal region and their clinical significance. Structures in all three compartments of thigh and leg; Poplitea fossa;. Muscles and neurovascular structures in the sole of foot; Arches of foot and their applied anatomy; All joints of lower extremity.

5. THORAX

Skeleton, joints, neurovascular structures, muscles and movements of thoracic wall; thoracic apertures; Pleura, lungs and tracheobronchial tree and their surface marking and applied importance; Boundaries and contents of mediastinum and applied anatomy. Pericardium, Chambers and blood supply of heart and their applied

importance. Surface marking of borders and valves of heart and their relation to the areas of auscultation. Development of Heart and its anomalies. Arch of aorta, SVC, IVC, thoracic part of oesophagus, thoracic duct and azygos system of veins; Development of major blood vessels from aortic arches and their associated anomalies.

6. GENETICS

Genetic basis of congenital disorders, Structure of chromosome, Tissue culture and karyotyping, Abnormalities of Chromosomes with special emphasis to Klinefelter syndrome, Turner's syndrome and Down's syndrome, Chromosomal aberrations, Genetic counseling, Pedigree and Modes of inheritance.

7. HEAD AND NECK

Scalp; Face and its development; Pituitary gland, Cranial meninges and the dural venous sinuses; Eyelid and lacrimal apparatus; Nerves and vasculature of orbit; Extraocular muscles of Eyeball; Parasympathetic ganglia, Muscles of mastication, T.M. joint, Nasal cavity and Paranasal air sinuses. External, Middle and Internal ear. Cervical fascia, Pharynx, Larynx, Thyroid gland, its development and applied significance; Cranial nerves, sympathetic ganglia in the neck; Development of branchial arches.

8. BRAIN

Spinal cord – external features, blood supply and development. Medulla oblongata, Superficial & Deep blood supply of brain and their applied importance; Midbrain, Pons, Cerebellum; Ventricles of brain and subarachnoid cisterns; Sulci, Gyri and functional areas of the cerebrum. White matter of cerebrum – Internal capsule; Basal nuclei, Optic pathway, Thalamus; Development of brain and Functional columns. Ascending & descending tracts spinal cord and brain stem.

9. ABDOMEN AND PELVIS

Anterior abdominal wall – muscles, blood vessels and nerves. Incisions on the anterior abdominal wall, Rectus sheath and contents; Inguinal canal, Testis and spermatic cord; Peritoneum, its reflections and applied anatomy. Development of GIT – Rotation of midgut and its associated anomalies; Stomach, Duodenum, Colon, Pancreas, Spleen, Portal Vein, Liver & Gallbladder, Extrahepatic biliary apparatus; Diaphragm, its development and associated anomalies; Uterus, Ovary, Prostate; Rectum and Anal canal and their applied importance; Pelvic floor, Pelvic vessels, nerves and lymph nodes; Development of Urogenital system; Kidney, Suprarenal gland, Ureters, Urinary bladder; Development of external genitalia.

10. PERINEUM

Ischiorectal fossa, Perineal pouches, Perineal body, Pudendal canal, Pudendal Nerve.

SYLLABUS – PRACTICALS

(During the course, the PG students should dissect the entire human cadaver.)

1. UPPER LIMB

Introduction, Pectoral region and axilla, Cutaneous nerves and vessels The brachial plexus, The dissection of back, The free upper Limb, Lymph vessels and lymph nodes of upper limb, Cutaneous nerves of upper limb and deep fascia of upper limb; The shoulder - movements of the limb at the shoulder, the shoulder joint. The arm – anterior compartment, Posterior compartment of arm. The forearm and hand, Palmaraponeurosis, Superficial palmar arch, Flexor retinaculum, Flexor tendons, The arteries and nerves of the Flexor compartment of the fore arm , Muscles of the front of the forearm and hand , Fascial compartments of the palm, The extensor compartment of the forearm and hand, Extensor tendons of the finger. Joints of the upper limb – elbow joint, wrist joint, radio-ulnar joints, intercarpal, metacarpal and intermetacarpal joint.

2. LOWER LIMB

Sole of the foot, 1st and 2nd layer, 3rd and 4th layers, 5th and 6th layers, Front of thigh, Adductor canal, Medial side of thigh, Gluteal region Popliteal fossa, back of thigh, Hip joint, front of leg and dorsum of foot, Superficial dissection Anterior compartment of leg, Lateral and medial compartments of leg, Back of leg, Ankle, Tibio – fibular and other joints, revision.

3. THORAX

Introduction: Walls of thorax, Cavity of thorax Mediastinum, Root of lungs Autonomic nervous system The lungs, Anterior Mediastinum, Middle mediastinum Surface anatomy of the heart, Chamber of heart, Right atrium, Right ventricle, Left ventricle, Aorta, Superior mediastinum, Arch of aorta, Left atrium, Conducting system of heart, Thoracic part of aorta. Vagus, Oesophagus, Thoracic duct, Posterior intercostals vessels, Joints of thorax, Revision.

4. HEAD AND NECK

The superficial dissection of face, Cervical vertebrae, skull, the temple and the infratemporal region. Nerves and vessels of scalp; Superficial temporal region. The side of the neck, the anterior and posterior triangles of neck; the median region of the front of neck; subdivisions of anterior triangle.

The cranial cavity: Structures seen after removal of brain, Cranial fossae

Deep dissection of the neck: Thyroid & Parathyroid glands , trachea and oesophagus, Brachio-cephalic trunk, Subclavian artery, Branches of subclavian artery Brachio cephalic veins, Thoracic duct, Vertical neurovascular bundles of the neck, Neurovascular bundles of the neck, at the base of the neck and at the base of the skull.

Nerves of the neck. Scalene muscles, Cervical fascia, Lymph nodes and lymph vessels of the head and neck, The prevertebral region.

Deeper dissection of the face: Nerves of the face Structures of the cheek and lips The eyelids, the lacrimal apparatus. The orbits, the structures in the orbit. The parotid region, the parotid gland. The temporal and infratemporal region Temporal fascia, Temporalis muscle. The superficial contents of the infratemporal fossa Temporomandibular joint, The deeper contents of the infratemporal fossa. The submandibular gland, Mylohyoid muscle, Hyoglossus, Stylohyoid ligament. The mouth and pharynx , The cavity of the nose, The larynx, The tongue The organs of hearing and equilibration The eye ball The contents of the vertebral canal, the joints of the neck.

Brain:

Introduction: The membranes of the brain- meninges Blood vessels of the brain The Cerebellum, The fourth ventricle, The midbrain, pons, medulla The cerebrum , the white matter of the cerebrum Ventricles of brain and the choroid fissure The thalami and the optic tracts The deep dissection of the hemisphere The deep nuclei of the telencephalon The nuclei and connections of the thalamus, Cerebral topography.

5. ABDOMEN

Anterior abdominal wall muscles, inguinal canal. Nerves and vessels of anterior abdominal wall Male external genital organs Dissection of the loin

Abdominal cavity

Shape, Boundaries, Divisions of peritoneal cavity Ligaments of liver, Spleen Oesophagus, Vagal trunk, stomach, Mesentery Superior mesenteric artery, Inferior mesenteric artery, Arterial anastomosis on GI tract, Structure of small intestine, Large intestine, Duodenum, Portal vein, Ducts of liver, Pancreas, Liver, Gall bladder, Cystic duct, Abdominal structures in contact with diaphragm, Autonomic nervous system, supra renal glands, The kidneys , Abdominal part of ureter The diaphragm, The posterior abdominal wall muscles The inferior venacava Lymph nodes of posterior abdominal wall the azygos and hemiazygos veins the muscles of posterior abdominal wall, The nerves of posterior abdominal wall The pelvic viscera, ovaries, uterine tubes Pelvic part of ureters Urinary bladder, Internal surface of urinary bladder Ductus deferens, Prostate, Male urethra Uterus, Rectum, Anal canal Vessels of lesser pelvis, Nerves of lesser pelvis, Obturator nerve, Autonomic nerves The muscles of lesser pelvis joints of pelvis

Perineum Ischiorectal fossa, Perineal pouches Perineal body, Pudendal canal

6. HISTOLOGY

Epithelium Connective tissue Cartilage- Hyaline, elastic, fibro cartilage Bone – C.S , L.S Muscles – skeletal , smooth, cardiac Nervous tissue – neuron, nerve fibre, sciatic and optic nerves, sympathetic spinal ganglia.
Blood vessel – Large and medium sized artery, large medium sized vein.

Lymphoid tissue – lymph node, spleen, thymus, palatine tonsil. Skin – thick, thin Mammary gland – active, inactive Placenta, umbilical cord Respiratory system – trachea, lungs Nervous system – spinal cord, cerebrum, cerebellum, cornea, retina Endocrine system – thyroid parathyroid, supra spinal, pituitary Excretory system – kidney, ureter, urinary bladder, Reproductive system Male: Testis, epididymis, vas deferens, prostate
Female: Ovary, uterus, - proliferative and secretory, Fallopian tube
Digestive system – Salivary glands- mucous, serous & mixed, pancreas, liver, gall bladder, tongue, oesophagus. Stomach – fundus, pylorus, duodenum, jejunum, ileum, large intestine, appendix. Chromosome spread

TEXT BOOKS & JOURNALS RECOMMENDED

I. Gross Anatomy

1. Susan Standring - Gray's, Anatomy - 39th Edition, Elsevier 2005.
2. Richard L. Drake- Gray's Anatomy for Students – Churchill Livingstone, Elsevier – 2005
3. G. J. Romanes -Cunningham's manual of Practical Anatomy – 3 volumes, Oxford Medical Publications
4. Keith & Moore - Clinically Oriented Anatomy - 3rd Edition, 1992 Williams & Wilkins.
5. Snell.S.Richard- Clinical Anatomy by Regions - 8th Edition, Lippincott Williams and Willkins, 2008.
6. Gosling, Harris - Human Anatomy, 4th Edition, Mosby - 2002
7. Kulkarni- Clinical Anatomy for Students, First edition, Jaypee Brothers - 2006
8. Indirbir Singh - Textbook of Anatomy – 4th Edition, Jaypee Brothers – 2006
9. McMinn R.M.H. Last's, Anatomy - 8th, Edition, ELBS, 1990.
10. BasmajainV.John and SloneckerE.Charles, Grants Method of Anatomy, 11th Edition, Williams and Wilkins 1989.
11. Hollinshed W. Henry, Anatomy for Surgeons - 411 Edition, Harper and Raw Publishers, 1985.
12. DUPLESSIS and Gadecker Lee Mcgregor's, Synopsis of Surgical Anatomy - 12th Edition, K.M.Varghese Company, 1986.
13. Grant Boileau. J.C., An Atlas of Anatomy - 5th Edition, Williams and Willkins - 1984.
14. Graggs Hall E.C.B, Anatomy as a basis for Clinical Medicine - 2"d Edition. Williams and Williams, 1990.
15. McMinn M. H. Robert, McMinn'sFunctional and Clinical Anatomy -1st Edition, Mosby Publications, 1995.
16. A. K. Datta, TextBook of Anatomy Vol. I, II & III - 4th, Edition, 1997 Current Books International.
17. Le Gross Clark, Tissues of the Body - 6thEdition, 1980 Oxford University Press.
18. Vishram Singh- Clinical & Surgical Anatomy, 2nd Edition, Elsevier – 2007
19. Surface and Radiological Anatomy – A. Halim and A.C.Das

II. Histology

1. Cormac K. H.D avid, Ham's Text Book of Histology - 9th Edition, J.B.

Lippincott Company, 1987.
2. Copenhaver M. Wilfred et.al, Bailey's text book of Histology, 17th, Edition, William and Wilkins, 1978.
3. Difiore's. - Atlas of Human Histology with functional correlations - 11th Edition, Lippincott Williams & Wilkins. First Indian Reprint - 2008
4. Janqueira.C.Luisetal, Basic Histology - 2nd Edition, Large Medical Publication, 1971.
5. Drury R.A.B., Wallington E.A. Canton's, Histological Technique - 5th Edition, Oxford University, Preces, 1980.
6. Cullings, Histological Technique - 3rd Edition, 1994 Butterworths.
7. John D Bancroft, Manual of Histological Technique - Ist Edition, 1984 Churchil Livingstrone.
8. Michael H Ross, Histology - A Text & Atlas - 3rd Edition, 1985 Williams & Wilkins.
9. Bloom and Fawcett, Text Book of Histology. W.**B.Saunder's Company.**

III. Embryology

1. Hamilton W.J. and Mossman H.W., Human Embryology - 4th Edition, Williams and Wilkins Company, 1972.
2. Langman's Medical Embryology T W Sadur – 9th edition 2004, Lippincott, Willliams&Willkins.
3. Moore Persaud - Developing Human – Clinically Oriented Embryology – Elsevier –7th Edition, First Indian Reprint -2003
4. A.K.Datta, Essentials of Human Embryology – 2nd Edition, Current Books International, 1991.
5. Larsen, Human Embryology - 2nd Edition, 1997, Churchill Livingstone.
6. Inderbir Singh- Human Embryology – 8th Edition, 2007

IV. Neuroanatomy

1. Everett N.B., Functional Neuroanatomy, 6th Edition, Lee and Febigger, 1971.
2. Snell. S. Richard- Clinical Neuroanatomy for Medical Students, - 7th Edition, Lippincott Williams &Willkins -2009.
3. Chusid. G. Joseph, Correlative Neuroanatomy and Functional Neurology - 16th Edition, Lange Medical Publication, 1976.
4. A. K. Datta, Neuroanatomy, - 1stEdition, Current Books International, 1997.
5. Parent Andre, Carpenter's Neuroanatomy- 9th Edition, Williams and Wilkins, 1996.
6. Inderbir Singh - Neuroanatomy- 8th Edition, Jaypee Brothers Medical Publications - 2009.
7. Vishram Singh – Neuroanatomy- Elsevier – 2009

V. Human Genetics / Medical Genetics

1. Robert F Mueller, Emery's Elements of Medical Genetics - 9th Edition, 1995, Churchill Livingstone.
2. Nora & Frazer, Medical Genetics Principles - 1974 Lee &Gebiger, Philadelphia.
3. Friedman, NMS Genetics - 2nd Edition, 1996.
4. Alfred G Kudson Jr., Genetics & Disease - McGraw Hill Book Company

N.Y.,
5. Thomas D. Gelehrtar, Principles of Medical Genetics - 2nd Edition, 1990 Williams & Wilkins.
6. J.M.Conner M A Ferguson Smith - Essentials of Medical Genetics - Blackwell Scientific publications.
7. Bhatnagar, Kothari andLopo–Mehta- Essentials of Human Genetics

VI. Comparative Anatomy

1. Banks Histology and Comparative Organology - A Text & Atlas – Edition 1974.
2. Wolstenhome, Taste & Smell in Vertebrates - Edition 1970.
3. Embryogenesis in Mammals CIBA foundation - Edition 1976.
4. George C. Kent, Comparative Anatomy of the Vertebrtes- 3rdEdition, 1983 Mc. Graw Hill Book Company.
5. Romer, Vertbrate Body- 5thEdition, 1978, V.B. Saunders Company.

VII. Physical Anthropology

1. Harrison, Human Biology an introduction to Human Evolution and Growth - 2nd Edition, 1970.
2. Poirier, Fossil Man, 1973.

VIII. Embalming Techniques

1. Jayavelu T., Embalming Techniques, Churchill Livingston.
2. Ansari M.C., Embalming.
3. Embalming - Ajmani 1" edition 1998, J.P. Publishers.

IX. Museum Techniques

1. Tompsett RH, Anatomical Techniques.
2. Edwards A Medical Museum Techniques, Oxford University Press.

X. JOURNALS

1. Journal of Anatomical Society of India.
2. Journal of Anatomy.
3. ActaAnatomica.
4. American Journal of Anatomy.
5. American Journal of Physical Anthropology.
6. Journal of Morphology, Embryology
7. Anatomical Record
8. American Journal of Medical Genetics.
9. Annual Review of Genetics.

XI. ADDITIONAL READING

1. Compendium of recommendations of various committees on Health and Development (1943- 1975). DGHS, 1985 Central Bureau of Health Intelligence,

Directorate General of Health Services, Ministry.of Health and Family Welfare, Govt. of India, NirmanBhawan, New Delhi.
2. National Health Policy, Ministry. of Health & Family Welfare, NirmanBhawan, New Delhi, 1983.
3. Santosh Kumar -The elements of Research, writing and editing 1994, Dept. of Urology, JIPMER, Pondicherry.
4. Srinivasa DX et. al, Medical Education Principles and Practice, 1995. National Teacher Training Centre, JIPMER, Pondicherry.
5. Indian Council of Medical Research, "Policy Statement of Ethical considerations involved in Research on Human Subjects", 1982, I.C.M.R., New Delhi.
6. Code of Medical Ethics framed under section 33 of the Indian Medical Council Act, 1956. Medical Council of India, Kotla Road, New Delhi.
7. Francis C.M, Medical Ethics, J P Publications, 2nd. 2004.
8. Indian National Science Academy, Guidelines for care and use of animals in Scientific Research, New Delhi, 1994.
9. International Committee of Medical Journal Editors, Uniform requirements for manuscripts submitted to biomedical journals, N Eng; J Med 1991.
10. Kirkwood B R, Essentials of Medical Statistics, 1st Ed., Oxford: Blackwell Scientific Publications 1988.
11. Mahajan B K. Methods in Bio statistics for medical students, 5th Ed. New Delhi, Jaypee Brothers Medical Publishers, 1989.
12. Raveendran, B. Gitanjali, A Practical approach to PG dissertation, New Delhi JP Publications, 1998.

****