Outer Cover Page

College Logo

University Logo

Name of the College…….

Name of University……..

SIDDHA MARUTHUVA ARIGNAR
BACHELOR OF SIDDHA MEDICINE AND SURGERY

FIRST PROFESSIONAL B.S.M.S

UDAL KOORUGAL
(ANATOMY)

SIDUG – UK

PRACTICAL RECORD BOOK

Name of the Student : ----------

Institutional Roll No. : ----------

AcademicYear: ----------

DEPARTMENT OF UDAL KOORUGAL(ANATOMY)

Inner FirstRight Page

UNIVERSITY LOGO

COLLEGE LOGO

NCISM LOGO

COLLEGE NAME……

APPROVED BY
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE, NEW DELHI

AFFILIATED TO
UNIVERSITY NAME…….

SIDDHA MARUTHUVA ARIGNAR
BACHELOR OF SIDDHA MEDICINE AND SURGERY

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UDAL KOORUGAL
(ANATOMY)

SIDUG – UK

PRACTICAL RECORD BOOK

Name of the Student : ----------

Unique AYUSH ID No : ----------

University Register/Enrollment No.: ----------

Institutional Roll No. : ----------

AcademicYear: ----------

DEPARTMENT OF UDAL KOORUGAL(ANATOMY)

2nd Right Page-Certificate

UNIVERSITY LOGO

COLLEGE LOGO

NCISM LOGO

COLLEGE NAME……

APPROVED BY
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE, NEW DELHI

AFFILIATED TO
UNIVERSITY NAME…….

CERTIFICATE

This is to certify That Mr./Mrs./Miss…… (Name of student) bearing Roll No…… and University Register/Enrollment No…… has satisfactorily completed all the Practical of UDAL KOORUGAL (ANATOMY) **SIDUG – UK** *prescribedby the National Commission for Indian System of Medicine as a part of First Professional B.S.M.S Course.*

HEAD OF THE DEPARTMENT

Submitted for the Practical Examination Conducted by …… (University Name), held on…… (date) at……(College name).

EXAMINERS

Date:---------- **Internal: ----------**

Place:---------- **External: ----------**

3rd Right Page-Index

INDEX

Sr. No.	Date	Name of Practical	Term	Page No.	Signature of Faculty
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INSTRUCTIONS & GUIDELINES

General

1. The common format for the practical prescribed by the NCISM is aiming to maintain uniformity among colleges/institutions across the country.

Instructions to Students

2. The student will prepare the practical record book, including the cover page, first inner page, certificate page, and index page as per the format prescribed by the NCISM here.

3. The student will record in the practical record book handwritten immediately after each practical and get the signature of the concerned teaching faculty.

4. The student will use the specific format/template for recording each practical in the practical record book.

Instructions to Teachers/HOD

5. It is the responsibility of the department to conduct practicals as per the list, schedule, method, etc., specified in the curriculum.

6. The teacher must instruct the student to record his/her work as per the specific format prescribed by the NCISM here.**(List of practical and format references are enclosed herewith)**

7. After each practical, the concerned teacher must verify the completion of the record work and put the signature in the index page.

8. The certificate page of the practical record will be certified and signed by the concerned head of the department.

9. Normal values or any other important information confined to the subject, if any, may be printed in the last pages.

Guidelines specific to the subject

1.Use appropriate anatomical terminologies while writing the description

2.Provide clear and precise illustrations of anatomical structures and their relationships.

3.Use appropriate colour for the diagrams

4.Label all the diagrams accurately

5.Note few relevant pathological conditions or anatomical variations associated with the recorded diagrams wherever necessary

List of Practical and Format Reference

SN	Name of the Practical (P)	Format Reference
1	Practical study of General Anatomy and Histology	**I**
2	Practical study Embryology	**II**
3	Practical study of Bones of Upper and Lower limb	**III**
4	Practical study of Bones of Skull, Mandible, Hyoid, Paranasal sinuses	**III**
5	Practical study of Bones of Vertebral Column, thorax	**III**
6	Practical study of major Joints of Upper, Lower limb, Pelvis	**IV**
7	Practical study of Temporomandibular joint	**IV**
8	Practical study of Inter-vertebral joints	**IV**
9	Practical study of Muscles of Upper Lower limbs, Pectoral, Scapular and Gluteal regions	**V**
10	Practical study of major Muscles of Head and the Neck, Triangles of Neck	**V**
11	Practical study of major muscles of Thorax and Abdomen	**V**
12	Practical study of Blood vessels and Lymph nodes of Upper and Lower limb	**VI**
13	Practical study of major Blood vessels and Lymph nodes of Head and the Neck	**VI**
14	Practical study of major Blood vessels of Heart	**VI**
15	Practical study of major Blood vessels and Lymph nodes of Thorax and Abdomen	**VI**
16	Practical study of Radiological and Surface Anatomy	**VII**
17	Practical study of Gross structures of Central Nervous system	**VIII**
18	Practical study of Gross structure of Nerves of Upper and Lower limbs	**VIII**
19	Practical study of Gross structure of Cranial nerves (1 to 8)	**VIII**
20	Practical study of Gross structure of Cranial nerves (9 to12), Intercostal nerves	**VIII**
21	Practical study of Gross structures of Special Sense Organs	**IX**
22	Practical study of Gross structures of Respiratory Organs	**X**
23	Practical study of Gross structures of Heart	**X**
24	Practical study of Gross structures of Digestive organs	**XI**
25	Practical study of Gross structures of Excretory Organs	**XII**

26	Practical study of Gross structures of Reproductive organs	**XII**
27	Practical study of Gross structures of Thyroid gland	**XIII**
28	Practical study of Gross structures of Supra-renal gland	**XIII**

FORMAT:I

(FOR THE PRACTICAL P1)

PRACTICAL STUDY OF HISTOLOGY

(Diagrams Right side and description left side)

- Structure
- Function
- Locations
- Cells
- Specialfeatures

FORMAT:II

(FOR THE PRACTICAL P2)

PRACTICAL STUDY OF EMBRYOLOGY

(Diagrams Right side and description left side)

Placenta with umbilical cord

- Features
- Measurementsofplacenta&umbilicalcord
- Structure
- Classification
- Functions
- Contentsofumbilicalcord

Fetalcirculation

- Specialstructures
- Peculiarities
- Circulatorychangesatbirth

FORMAT:III

(FOR THE PRACTICAL P3, P4, P5)

PRACTICAL STUDY OF BONES

(Diagrams Right side and description left side)

- Nameofthebone:
- Typeofthebone:
- Location:
- SideIdentification:
- Sexdetermination:
- Typicalfeatures:
- Foramens:
    - **i.** Nameoftheforamen
    - **ii.** Presentinwhichbone
    - **iii.** Structurespassingthroughtheforamen
    - **iv.** Communicatingareas
- Muscleattachments:
- Applied/ClinicalAnatomy:

FORMAT:IV

(FOR THE PRACTICAL P6, P7, P8)

PRACTICAL STUDY OF MAJOR JOINTS

(Diagrams Right side and description left side)

- Type
- Articularsurface
- Ligaments
- Relations
- Movements
- Bloodsupply
- Nervesupply
- Appliedanatomy

FORMAT:V

(FOR THE PRACTICAL P9, P10, P11)

PRACTICAL STUDY OF MAJOR MUSCLES

(Diagrams Right side and description left side)

- Introduction
- Origin
- Boundaries&Contents
- Features
- Insertion
- Nervesupply
- Actions
- Applied/ClinicalAnatomy

FORMAT:VI

(FOR THE PRACTICAL P12, P13, P14, P15)

PRACTICAL STUDY OF MAJOR BLOOD VESSELS AND LYMPHNODES

(Diagrams Right side and description left side)

- **Situation**
- **Features**
- **Commencement/Formation**
- **Course**
- **Termination**
- **Branches/Tributaries**
- **Applied/ClinicalAnatomy**

FORMAT: VII (a)

(FOR THE PRACTICAL P16)

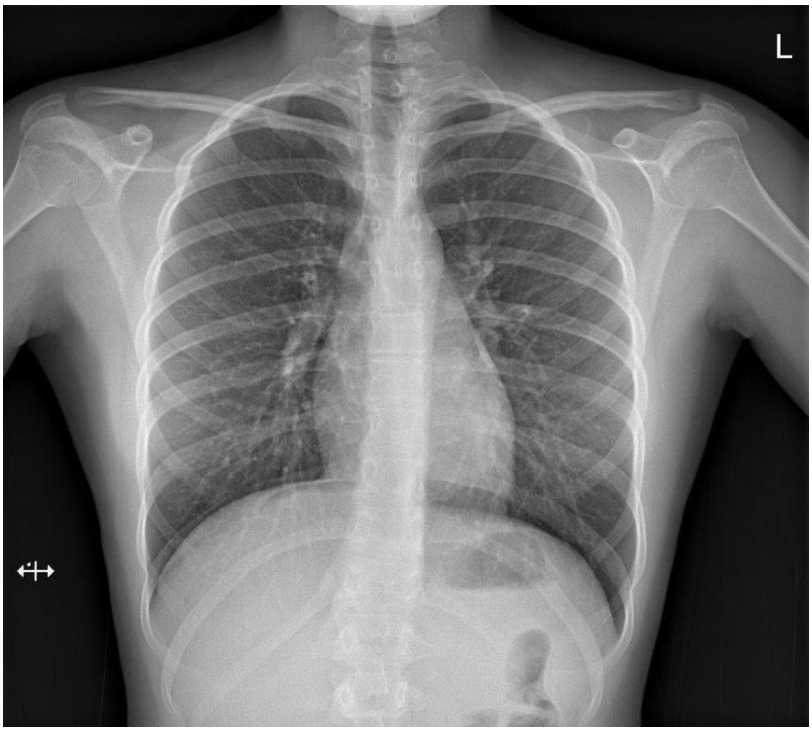
PRACTICAL STUDY OF RADIOLOGICAL AND SURFACE ANATOMY

(Image Right side and description left side)

X- ray Chest PA view

Identification and Anatomy

Note: Radio image in this format can be attached and necessary labeling can be done.



FORMAT: VII(b)

(FOR THE PRACTICAL P16)

PRACTICAL STUDY OF RADIOLOGICAL AND SURFACE ANATOMY

(Image Right side and description left side)

Intravenous pyelogram

Identification and Anatomy

Note: Radio image in this format can be attached and necessary labeling can be done.

FORMAT: VII(c)

(FOR THE PRACTICAL P16)

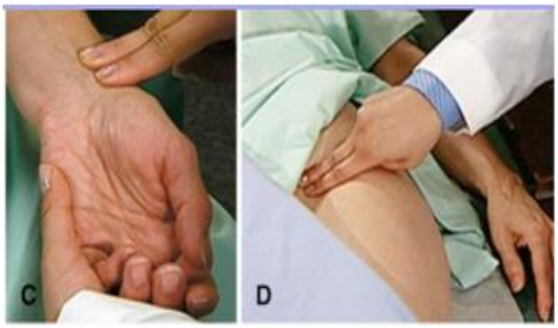
PRACTICAL STUDY OF RADIOLOGICAL AND SURFACE ANATOMY

(Image Right side and description left side)

Palpation of Arteries

- **Name of the arteries.**
- **Location**
- **Applied/Clinical Anatomy**

Note: Image in this format can be attached and surface marking for selected arteries can be given



FORMAT:VII(d)

(FOR THE PRACTICAL P16)

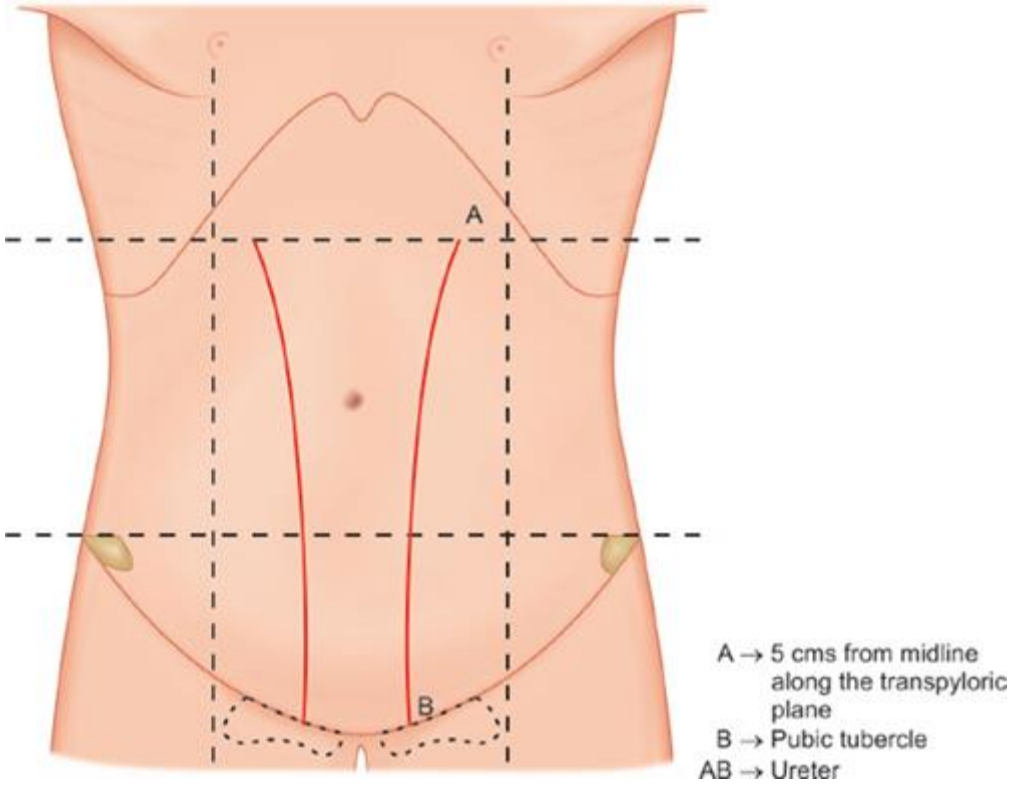
PRACTICAL STUDY OF RADIOLOGICAL AND SURFACE ANATOMY

(Diagrams Right side and description left side)

Nine Quadrants of Abdomen

- **Name the quadrant**
- **Location**
- **Structures Present**
- **Applied/Clinical anatomy**

Note: Image in this format can be attached and surface marking for selected arteries can be given



FORMAT:VIII

(FOR THE PRACTICAL P17, P18, P19, P20)

PRACTICAL STUDY OF GROSS STRUCTURE OF NERVOUS SYSTEM

(Diagrams Right side and description left side)

Plexus

- Situation
- Rootvalue
- Formation
- Features
- Branches
- Applied/Clinical Anatomy

Cutaneous Innervation

- Name
- Regionofsupply
- Rootvalue
- Derivedfromwhichnerve

FORMAT:IX

(FOR THE PRACTICAL P21)

PRACTICAL STUDY OF GROSS STRUCTURES OF SPECIAL SENSE ORGANS

(Diagrams Right side and description left side)

Eye ball

- Introduction
- Concentric coat
- Clinical anatomy

Tongue

- Introduction
- Parts
- Papillae
- Muscles
- Blood supply
- Nerve supply
- Lymph nodes
- Clinical anatomy

FORMAT:X

(FOR THE PRACTICAL P22, P23)

PRACTICAL STUDY OF GROSS STRUCTURE OF RESPIRATORY ORGANS & HEART

(Diagrams Right side and description left side)

- Location&dimensions
- Features
- Structures
- Fissures/Sulcus
- Relations
- Bloodsupply
- Lymphatic drainage
- Nervesupply
- Applied anatomy

FORMAT:XI

(FOR THE PRACTICAL P24)

PRACTICAL STUDY OF GROSS STRUCTURES OF DIGESTIVE ORGANS

(Diagrams Right side and description left side)

- Situation
- Measurements
- Features
- Relations
- Bloodsupply
- Lymphaticdrainage
- Nervesupply
- Applied/ClinicalAnatomy

FORMAT:XII

(FOR THE PRACTICAL P25, P26)

PRACTICAL STUDY OF GROSS STRUCTURES OF EXCRETORY AND REPRODUCTIVE ORGANS

(Diagrams Right side and description left side)

- Location
- Measurements
- Features
- Relations
- Bloodsupply
- Nervesupply
- Applied/ClinicalAnatomy

FORMAT:XIII

(FOR THE PRACTICAL P27, P28)

PRACTICAL STUDY OF GROSS STRUCTURES OF SUPRARENAL AND THYROIDGL AND

(Diagrams Right side and description left side)

- Introduction
- Lobes
- Situation
- Dimension&weight
- Shape/Capsules
- Parts&relations
- Bloodsupply
- Lymphaticdrainage
- Nervesupply
- Applied/Clinical anatomy

FACTS:

- The shortest muscle in the human body is the stapedius
- The strongest and longest bone in the human body is the Femur
- The smallest bone in the human body is the Stapes
- The largest muscle in the human body is the Gluteus maximus
- Soleus is called as peripheral heart
- **Structures in the body having greater width than length:**
  - Pituitary gland
  - Coeliac trunk
  - Prostate
  - Caecum
  - Isthmus of thyroid gland
  - Pons
- **Structures of about 45 cm or 18 inches:**
  - Length of Vas deferens or ductus deferens
  - Length of thoracic duct
  - Length of Spinal cord
  - Length of Femur (for 6 feet person)
  - Length of transverse colon
  - Distance from the incisor teeth to the cardiac end of the stomach
  - Length of sartorius muscle
- **Structures of about 25 cm or 10 inches:**
  - Length of Esophagus
  - Length of Ureter
  - Length of Duodenum
  - Length of Descending colon
- **Structures of about 10 cm or 4 inches:**
  - Length of Trachea
  - Length of Fallopian or Uterine tube
  - Length of Common bile duct
  - Length of 3rd part of Duodenum (Transverse Duodenum)
  - Length of Posterior wall of Vagina
  - Anteroposterior measurement of Inlet of Pelvis
  - Transverse measurement of Outlet of Pelvis

- **Structures of about 4 Cms or 1.5 inches:**
  - Length of Auditory tube
  - Length of Anal canal
  - Length of Female urethra
  - Length of Cystic duct
  - Length of Common hepatic duct
  - Length of Optic nerve
  - Length of Ovary
  - Length of Inguinal canal
  - Length of Femoral sheath
  - Thickness of Kidney
  - Width of Pons
- **Structures of about 8**
  - Facial bones
  - Carpal bones
  - Branches of External carotid artery
  - Branches of Facial artery
  - The first heaviest organ is the skin with a mass of four to five kg.
  - The liver is the second heaviest organ in the body
  - Largest cell in the body is Ovum

Criteria for estimating fertilization age during the foetal period

S.NO	FETAL AGE (WEEKS)	CROWN - RUMP LENGTH (CRL MM)	FETAL WEIGHT (GMS)
1.	9	50	8
2.	10	61	14
3.	12	87	45
4.	14	120	110
5.	16	140	200
6.	18	160	320
7.	20	190	460
8.	22	210	630
9.	24	230	820
10.	26	250	1000
11.	28	270	1300
12.	30	280	1700
13.	32	300	2100
14.	36	340	2900
15.	38	360	3400

Derivatives of Germ layers

Understanding the germ layers is essential for comprehending the complex processes of human development and organogenesis.

- **Ectoderm gives rise to structures involved in the nervous system and skin.**
- **Mesoderm develops into muscles, bones, the cardiovascular system, and other connective tissues.**
- **Endoderm forms the lining of the gastrointestinal tract, respiratory system, and associated glands.**

1. **Ectoderm**

Surface Ectoderm:

- Epidermis of the skin and its derivatives (e.g., hair, nails, sweat glands)
- Lens of the eye
- Enamel of teeth
- Epithelium of oral and nasal cavities

Neuroectoderm:

- Central nervous system (CNS) (brain and spinal cord)
- Peripheral nervous system (PNS)
- Retina
- Neural crest derivatives (e.g., melanocytes, cranial nerves, adrenal medulla, facial cartilage)

2. **Mesoderm**

Paraxial Mesoderm:

- Somites (which differentiate into skeletal muscles, vertebrae, dermis of the skin)

Intermediate Mesoderm:

- Urogenital structures (kidneys, gonads, and their associated ducts)

Lateral Plate Mesoderm:

- Cardiovascular system (heart, blood vessels)
- Lymphatic system
- Connective tissues of the body and limbs
- Serous membranes lining body cavities (pericardium, pleura, peritoneum)
- Notochord:
- Nucleus pulposus of intervertebral discs

3. **Endoderm**

Epithelium of the Gut Tube:

- Epithelium of the gastrointestinal tract (excluding parts derived from the ectoderm like the mouth and anus)
- Liver, pancreas, gallbladder

Respiratory System:

- Epithelium of the respiratory tract (trachea, bronchi, lungs)

Other Structures:

- Epithelium of the thyroid, parathyroid glands
- Epithelium of the urinary bladder and urethra
- Epithelium of the auditory tube and middle ear cavity