

**SECTION – I
(Course Content)**

ABDOMEN, PELVIS, PERINEUM

SCHEDULE-1

ANTERIOR ABDOMINAL WALL AND EXTERNAL GENITALIA.

**Lecture: 03 hrs
Dissection/ Prosection: 10 hrs
Tutorials: 01 hr**

LECTURES:

- Planes and regions of the abdomen.
- Inguinal canal, spermatic cord, testis- coverings and descent.
- Rectus sheath

DISSECTION/ PROSECTION:

Relevant morphological features:- linea alba; umbilicus; linea semilunaris; midaxillary line; posterior axillary line.

Subcutaneous structures:- anterior and lateral cutaneous branches of lower intercostal nerves; subcostal nerve; iliohypogastric nerve; ilioinguinal nerve; superficial epigastric artery; dartos muscle; fatty and membranous layers of the superficial fascia.

Muscles:- obliquus externus abdominis; obliquus internus abdominis; cremaster muscle; transversus abdominis; rectus abdominis; pyramidalis.

Nerves:- muscular branches of lower intercostal; subcostal; iliohypogastric; ilioinguinal; genitofemoral.

Arteries:- lower posterior intercostal; subcostal; lumbar; superior epigastric; inferior epigastric; deep circumflex iliac.

Veins:- veins accompanying the above arteries.

External genitalia:

Male:- testis and its coverings; spermatic cord and contents.

Female:- round ligament.

Surface anatomy:- superficial inguinal ring; deep inguinal ring; inguinal canal.

Applied anatomy:- surgical incisions of the anterior abdominal wall; vasectomy; inguinal hernia; hydrocoele; undescended testis.

TUTORIAL TOPICS FOR THE WEEK

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| <ul style="list-style-type: none">• Relevant osteology.• Relevant radiological anatomy.• Relevant living anatomy.• Relevant cross-sectional anatomy. |
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SCHEDULE-2.

ABDOMINAL CAVITY, STOMACH AND INTESTINES.

**Lecture: 03 hrs
Dissection/ Prosection: 10 hrs
Tutorials: 01 hr**

LECTURES:

- Peritoneum,
- Stomach, jejunum and ileum
- Caecum and appendix.

DISSECTION/ PROSECTION:

Planes of abdomen:- vertical; subcostal; transtubercular; transpyloric.

Regions of abdomen:- epigastric; umbilical; hypogastric, right and left hypochondriac; right and left lumbar; right and left iliac.

Peritoneum:- parietal; visceral; greater sac; lesser sac; foramen of Winslow; median umbilical fold; medial umbilical folds; lateral umbilical folds; falciform ligament; left triangular ligament; lesser omentum; greater omentum; gastro-splenic ligament; lieno-renal

ligament; mesentery; meso-appendix; transverse mesocolon; phrenico-colic ligament.

Viscera:- Liver- lower margin; fissure for ligamentum teres; fissure for ligamentum venosum; porta hepatis; caudate lobe; **Gall bladder-** fundus, neck, body; **Stomach-** fundus; body; pyloric part; greater and lesser curvatures; incisura angularis; sulcus intermedius; stomach bed; interior of the stomach; arterial supply; venous drainage; lymphatic drainage; nerve supply; **jejunum and ileum-** extent; differences arterial supply; venous drainage; lymphatic drainage; nerve supply; **appendix-** position, arterial supply; **caecum-** posterior relations; **colon** - ascending, transverse, descending; pelvic; arterial supply; venous drainage; lymphatic drainage; nerve supply.

Portal vein:- formation, location.

Surface anatomy:- fundus of gall bladder; cardiac and pyloric orifices of the stomach; caecum and appendix.

Applied anatomy:- referred pain over the umbilical region and pain over the right iliac fossa in appendicitis.

TUTORIAL TOPICS FOR THE WEEK

- Relevant osteology.
- Relevant radiological anatomy.
- Relevant living anatomy.
- Relevant cross-sectional anatomy.

SCHEDULE-3

LIVER, PANCREAS, DUODENUM AND SPLEEN.

Lecture: 03 hrs
Dissection/ Prosection: 10 hrs
Tutorials: 01 hr

LECTURES:

- Duodenum and pancreas
- Liver and extrahepatic biliary apparatus
- Portal vein

DISSECTION/ PROSECTION:

Liver:- surfaces and margins; lobes; relations; structures passing through porta hepatis; bare area; common bile duct.

Gall bladder:- parts; cystic duct; arterial supply.

Duodenum:- subdivisions; relations; arterial supply; venous drainage; lymphatic drainage; opening of the bile duct.

Pancreas:- subdivisions; relations; arterial supply; venous drainage; openings of the pancreatic ducts.

Spleen:- position; relations.

Portal vein:- Formation and its tributaries; porto-systemic anastomoses.

Surface anatomy:- liver; gall bladder; common bile duct; duodenum; spleen.

Applied anatomy:- portal obstruction; biliary colic.

TUTORIAL TOPICS FOR THE WEEK

- Relevant osteology.
- Relevant radiological anatomy.
- Relevant living anatomy.
- Relevant cross-sectional anatomy.

SCHEDULE-4

KIDNEY, SUPRARENAL AND POSTERIOR ABDOMINAL WALL

Lecture: 03 hrs
Dissection/ Prosection: 10 hrs
Tutorials: 01 hr

LECTURES:

- Kidneys, ureters, suprarenals

- Abdominal aorta; inferior vena cava; posterior abdominal wall
- Diaphragm

DISSECTION/ PROSECTION:

Kidney:- coverings; relations; arterial supply; venous drainage; hilum.

Ureter:- course; constrictions; arterial supply; nerve supply.

Suprarenal:- relations; arterial supply; venous drainage.

Posterior abdominal wall.

Muscles:- diaphragm; psoas; quadratus lumborum; transversus abdominis; iliacus.

Nerves:- subcostal; lumbar plexus and branches; sympathetic trunk; coeliac, renal, intermesenteric and hypogastric plexuses.

Arteries:- Aorta and its branches.

Veins:- subcostal; inferior vena cava and its tributaries; azygos.

Lymphatics:- cisterna chyli.

Surface anatomy:- kidney; ureter; spleen; aorta; inferior vena cava.

Applied anatomy:- inferior vena caval obstruction; renal infarction; polycystic kidneys; ureteric colic.

TUTORIAL TOPICS FOR THE WEEK

- Relevant osteology.
- Relevant radiological anatomy.
- Relevant living anatomy.
- Relevant cross-sectional anatomy.

PELVIS

SCHEDULE-5

PELVIC VISCERA.

Lecture: 03 hrs
Dissection/ Prosection: 10 hrs
Tutorials: 01 hr

LECTURES:

- Uterus and adnexa.
- Rectum.
- Urinary bladder and prostate.

DISSECTION/ PROSECTION:

Identification of relevant skeletal features:-

hip bones - ilium; ischium; pubis;
sacrum - ala; anterior sacral foramina.
coccyx - coccygeal vertebrae; sacro-coccygeal articulation.
bony pelvis - inlet, outlet; diameters; ligaments.

Peritoneum:- Male: pelvic mesocolon; rectovesical pouch

Female: pelvic mesocolon; recto-uterine pouch; uterovesical pouch; broad ligament of the uterus; mesovarium; uterosacral folds.

Rectum:- flexures; ampulla; relations; arterial supply; venous drainage; supports.

Uterus:- position; parts; cavity; arterial supply; venous drainage; supports; transverse cervical ligament; uterosacral ligament; round ligament.

Fallopian tube:- intramural part; isthmus; ampulla; infundibulum; fimbriae; abdominal ostium.

Ovary:- attachments; relations; arterial supply; venous drainage; nerve supply; lymphatic drainage; ligament of ovary.

Vagina:- fornices; relations.

Urinary bladder:- shape; surfaces; relations in both the sexes; arterial supply; venous drainage; lymphatic drainage; nerve supply.

Ureter:- pelvic part - course; termination; arterial supply in both the sexes.

Ductus deferens:- course; termination.

Seminal vesicle:- shape, position, ducts.

Prostate:- shape; size; position; subdivisions; capsules; prostatic venous plexus; prostatic urethra; opening of the ducts.

Surface anatomy:- fundus of the urinary bladder.

Applied anatomy:- prolapse of the uterus; prolapse of the rectum; enlargement of the prostate; spread of cancer from pelvic viscera.

TUTORIAL TOPICS FOR THE WEEK

- Relevant osteology.
- Relevant radiological anatomy.
- Relevant living anatomy.
- Relevant cross-sectional anatomy.

SCHEDULE-6

BLOOD VESSELS, NERVES AND MUSCLES OF THE PELVIS.

Lecture: 02 hrs

Dissection/ Prosection: 10 hrs

Tutorials: 01 hr

LECTURES:

- Internal iliac artery and its branches.
and lymphatics of the pelvis.
- Pelvis diaphragm.

DISSECTION/ PROSECTION:

Arteries:- internal iliac; divisions and branches; median sacral.

Veins:- internal iliac and its tributaries.

Nerves:- sacral plexus; coccygeal plexuses; autonomic plexuses.

Muscles:- piriformis; obturator internus; coccygeus; levator ani and its subdivisions; *pelvic diaphragm*.

Applied anatomy:- pelvic diaphragm and mechanics of labour.

TUTORIAL TOPICS FOR THE WEEK

- Relevant osteology.
- Relevant radiological anatomy.
- Relevant living anatomy.
- Relevant cross-sectional anatomy.

SCHEDULE-7

PERINEUM

Lecture: 01 hrs

Dissection/ Prosection: 10 hrs

Tutorials: 01 hr

LECTURE:

- Ischiorectal fossa.

DISSECTION/ PROSECTION:

Anal triangle:- rectum and anal canal- sphincters; relations; mucous membrane; arterial supply; venous drainage; portosystemic anastomoses; nerve supply.

Ischiorectal fossa:- boundaries and contents.

Urogenital triangle:- superficial perineal pouch and its contents; deep perineal pouch and its contents.

Nerves:- pudendal nerve and its branches.

Arteries:- internal pudendal artery and its branches.

Veins:- internal pudendal vein and its tributaries.

Lymphatics:- superficial inguinal lymph nodes.

Surface anatomy:- pudendal canal.

Applied anatomy:- rectal examination; vaginal examination; pudendal block anaesthesia.

TUTORIAL TOPICS FOR THE WEEK

- Relevant osteology.
- Relevant radiological anatomy.
- Relevant living anatomy.
- Relevant cross-sectional anatomy.

SECTION – II
(Course Content under Level – I, II, III)
LECTURES

OUTLINE OF LECTURES

S.No	TOPIC	MUST KNOW	SHOULD KNOW	COULD KNOW
1.	ANTERIOR ABDOMINAL WALL	1. Regions of the abdomen and the viscera in relation. Landmarks Joints Muscles Nerves- Dermatomes 2. Superficial fascia & its attachments 3. Muscles & their actions 5. Dermatomal distribution 6. Blood Vessels 7 a. Portal obstruction b. Caval obstruction c. Lymph. Drainage d. Surface anatomy of superficial and deep inguinal rings e. Renal angle f. Murphy's point	3. Holden's line 7. Attachment of the muscles 8 a. Striae gravidarum & albicantes b. Extravasation of urine 11. Abdominal incisions	1. Langer's lines 4. Suspensory lig of penis
2.	RECTUS SHEATH	1. Formation at three levels 2. Arcuate line 3. Contents of rectus sheath 4. Linea alba 5. Linea semicircularis	6. Functional aspects of rectus sheath 5 g. Retraction of rectus muscle laterally	5. a. Divarication of recti b. Umbilical hernia c. Incisional hernia d. Faecal fistula e. Urinary fistula f. Meckel's diverticulum

3.	INGUINAL CANAL	<ol style="list-style-type: none"> 1. Descent of testis & processus vaginalis 2. Topography(location /surf projection) 3. Boundaries, extent & contents 4. a. Indirect & direct inguinal hernia b. Types of indirect hernias 	<ol style="list-style-type: none"> 4(i)Mechanisms of inguinal canal 4(ii)Interfoveolar lig 7. Anatomical consideration of hernia repair 	8. Canal of Nuck
4.	TESTIS & SPERMATIC CORD	<ol style="list-style-type: none"> 1. Coverings of spermatic cord and testis 2. Contents in males & females 3. Spermatic cord vis-à-vis hernial sac in direct and indirect inguinal hernias 4. Tunics of testis 5. Gross structure of testis 6. Blood supply, lymphatics 7. Nerve supply 8. Applied anatomy <ol style="list-style-type: none"> a. Hydrocele b. Vasectomy c. Cremaster reflex d. Scrotum – nerve supply 	<ol style="list-style-type: none"> 8 e. Varicocele f. Undescended testis g. Ectopic testis 	<ol style="list-style-type: none"> 8.h. Torsion of testis i. Appendix of testis j. Appendix of epididymis
5.	PERITONEUM	<ol style="list-style-type: none"> 1. Vertical disposition of peritoneum <ol style="list-style-type: none"> a. to the right of gall bladder b. to the left gall bladder 2.Horizontal disposition of peritoneum at: <ol style="list-style-type: none"> a. at epiploic foramen b. at umblicus c. in the pelvis 2. Greater Sac 4. Lesser sac (Omental bursa) and epiploic foramen 2Applied anatomy: <ol style="list-style-type: none"> a. Hepatorenal pouch b. Pouch of Douglas 6. Nerve supply of the peritoneum and referred pain 	<ol style="list-style-type: none"> 6(iv) Peritoneal recesses & bands 5. Functions of peritoneum 6. (I) Ascitis 6 (ii) Various spaces - supracolic, infracolic, pelvis 6(iii) Peritoneal fossae - lesser sac, duodenal fossae, intersigmoidal recess 	Peritoneal recesses and bands
6.	STOMACH	<ol style="list-style-type: none"> 1.Gross features 3. Relations & Stomach bed 5. Blood supply 6. Lymphatic drainage 7. N. supply 8. (I) Gastric ulcer and vagotomy 	<ol style="list-style-type: none"> 2. Musculature - magenstrausse gastric canal 7(ii) Endoscopy 7(iii) Barium meal 	<ol style="list-style-type: none"> 7(iv) Ca stomach-Trosier's sign 7(v) Traube's space 7(vi) congenital anomalies

7.	DUODENUM I & II	<p>1. Gross features including relations</p> <p>4. Interior : Openings and bile duct and pancreatic duct</p> <p>5.a. Blood supply</p> <p>6 a. Duodenal ulcer & cap b. Paraduodenal fossa</p> <p>7. Difference between small & large intestine</p>	<p>2. Prepyloric vein of Mayo</p> <p>6 c. Endoscopy & Endoscopic retrograde cholangio pancreaticography (ERCP)</p>	<p>1. Lig. of Treitz</p> <p>5 b. Supraduodenal artery of Wilkie c. Retroduodenal artery</p>
8.	CAECUM, APPENDIX and COLON Ascending Transverse Descending Sigmoid	<p>CAECUM: 1. Gross features including relations 2. Blood supply 3. Interior</p> <p>APPENDIX: a. Difference from large intestine b. Gross features including relations c. Blood supply d. Positions</p> <p>COLON: a. Gross features including relations b. Blood supply c. Interior</p>	<p>4. Shapes of caecum</p> <p>7. Clinical relevance of positions 8. McBurney's point</p>	<p>5 a. Recesses around caecum b. Lump in right iliac fossa</p> <p>9. Appendicitis vs Salpingitis /oophoritis 10. Anatomical considerations & surgical incisions</p>
9	LIVER	<p>1. Gross features including relations 2. Blood supply Lobes of the liver and vascular segments 3. Lymphatic drainage</p>		
10.	EXTRAHEPATIC BILIARY APPARATUS	<p>1. Components 2. Gross features of G.B. 3. Blood supply of G.B 4. CBD-Parts & relations</p> <p>6. Applied -gall stones</p>	<p>5. Sphincter of Oddi 7. Cholecystography</p>	<p>8. Callot's triangle 11. Endoscopic retrograde cholangio pancreatography (ERCP) 12. Hartmann's pouch 13. Phygian cap</p>
11.	PANCREAS	<p>1. Gross features of individual component including relations 2. Blood supply 3. Lymphatic drainage 4. Duct system 5. Sphincter of Oddi 6. Duodenal papillae</p>	<p>7. Splenectomy vis-à-vis tail of pancreas</p>	<p>8. CA head pancreas</p>
12.	PORTAL VEIN	<p>1. Definition of portal system 2. a. Formation & tributaries 3. Parts & relations 4. Porto-caval anastomosis: common sites & clinical bearing; haemorrhoids & esophageal.</p>	<p>2.b. Laminar blood flow</p>	

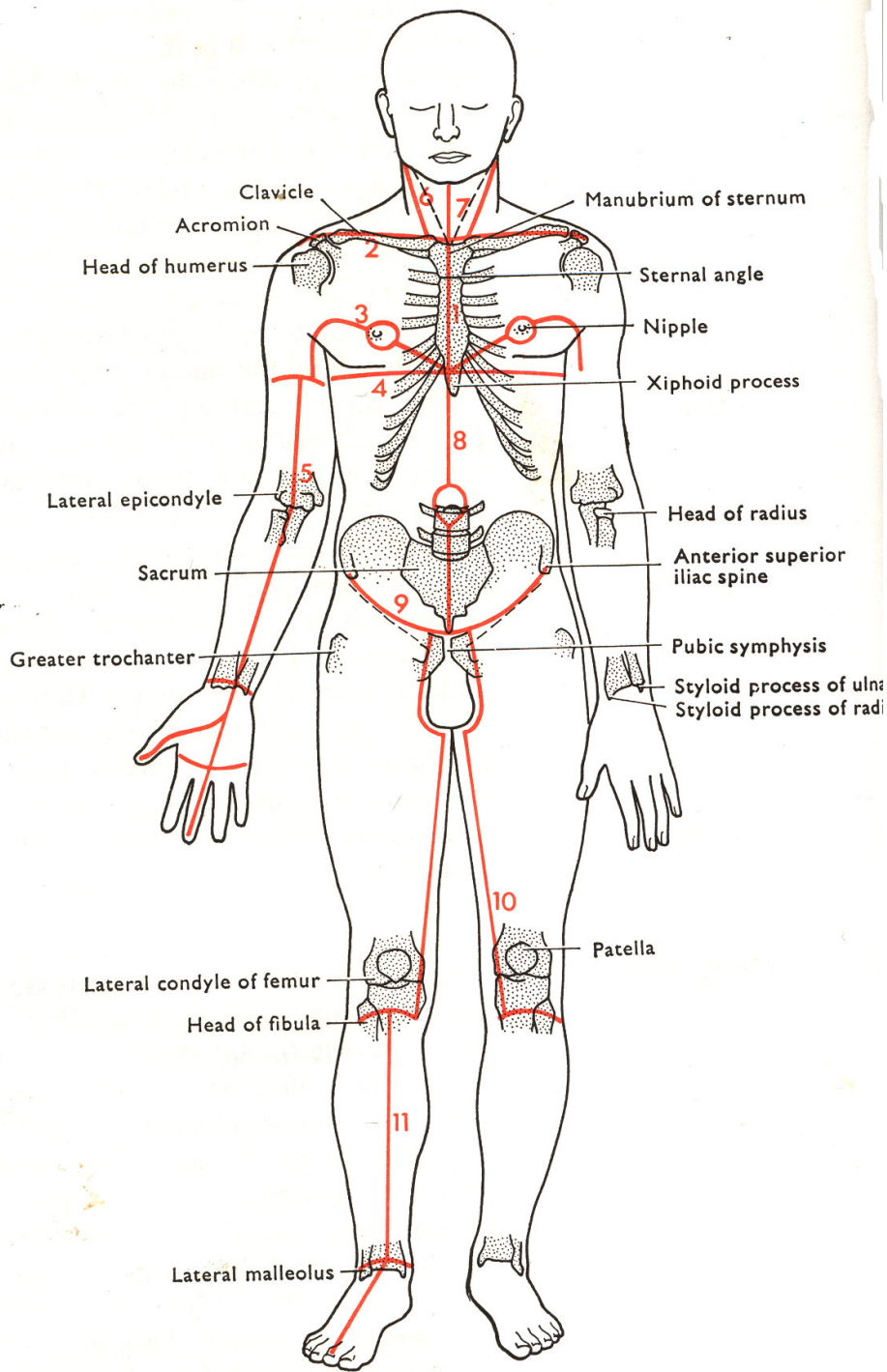
	Varices. 5. Caput medusae		7. Porto -caval shunt.
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S.No	TOPIC	MUST KNOW	SHOULD KNOW	COULD KNOW
13.	KIDNEYS	2. Gross features including relations 3. Coverings 5. a. Blood supply b. Vascular segments 7. Coronal section with internal feature	1. Morrison's parallelogram 4. Supports 8. Applied: a. Nutcracker effect on Lt. Renal vein b. Renal angle c. Exposure of kidney from back d. Pyelography	6. Pattern of division of renal artery 8 e. Floating kidney f. Horseshoe Kidney g. Abberent renal A h. Renal transplant i. Lithotripsy
14.	URETERS	1. Extent, course & terminations 2. Constrictions 3. Relations 4. Blood supply 5. Lymphatic drainage 6. Ureteric colic		7. Anomalies of the ureter
15.	DIAPHRAGM	1. Attachment 2. Openings 3. Nerve supply 5. Function	6. Applied anatomy: a. Diaphragmatic hernia b. Reflex arc for hiccups	6 c. Foramen of Bochdalek d. Phrenic crush
16. 17.	A. AORTA & INFERIOR VENA CAVA and B. POSTERIOR ABDOMINAL WALL	A. 1. Extent, course & termination 2. Relations 2. Tributaries	5. Porto-caval anaatomosis 6. Thoraco-epigastric Vn in block of IVC	4. Spread of carcinoma through systemic veins to vertebral venous plexus
18.	PERINEUM	1. Boundaries 2. Subdivisions 3. Colle's fascia & perineal membrane 4. Urogenital diahragm 5. Perineal body 6. Levator ani 7. Perineal pouches: Boundaries, contents 8. Nerve supply of the perineum	9. Rupture of urethra & extravasation of urine 10. Perineal tear 11. Episiotomy	
19.	ISCHIORECTAL FOSSA	1. Location 2. Boundaries & contents 3. Pudendal canal	4. Course of inf.rectal vessels & pudendal N 5. Recesses of IR Fossa 6. Applied:	

			6(I) Ischiorectal abscess 6(ii) Fistula in ano & Goodsall's rule	6(iii) Hiatus of Schwalbe
20.	URINARY BLADDER	1. Gross features & relations in male and female 2. Interior 3. N. supply 4. Blood supply: In male and female 5. Lymphatic drainage	6. Suprapubic cystostomy 7. Neurogenic bladder 8. Cystoscopy	9. Ectopia vesicae 10. Patent urachus
21.	A. PROSTATE & MALE URETHRA B. SEMINAL VESICLE	1. Gross features & relations 2. Internal structure 3. Blood supply 4. Age changes	5. Capsule vis-a-via prostatectomy 6. Benign prostatic hypertrophy 7. Symptoms & its anatomical considerations in BPH 8. Per rectal examination 9. Urethral catheterisation	10. TURP- Transurethral resection of prostate 11. Ca-prostate & spread
22.	OVARY, UTERUS and ADNEXA:	1. Gross features & relations 3. Position; Tubectomy 4. Blood supply 5. Lymph drainage 6. Supports of uterus - Broad ligament 7. Nerve supply and referred pain of ovary 8. Rectouterine fistula.	2. Rectouterine pouch & vesicouterine pouch 7. Prolapse of uterus 8. Hysterectomy	Uterine anomalies 9. Recurrent abortions in retroverted uterus
23.	SIGMOID COLON and RECTUM	1. Goss anatomy including relations and flexures 2. Sigmoid mesocolon and the ureter 2. Internal features 3. Blood supply with venous drainage 4. Lymphatic drainage 5. Applied anatomy: a. Imperforate anus b. Per rectal examination c. Fascia of Denonviller's d. Haemorrhoids e. Proctoscopy	4. Applied anatomy: f. Hirschsprung's Disease g. Prolapse of the rectum	5. Applied anatomy: h. Ca-rectum
24.	ANAL CANAL	1. Gross features; Anorectal junction 2. Internal features of anal canal: 2(i) White line 2(ii) Pecten 2(iv) Anal columns 3. Internal & external sphincters and nerve supply 4. Blood supply including venous drainage 5. Puborectalis – Anorectal ring	6(I) Internal & external haemorrhoids 6(ii) Porto-caval anastomosis 6(iii) Fissure -in -ano 6(iv) Fistula - in-ano	

			6(v) Perianal abscesses vis-à-vis ischio and abscess	6(vi) Goodsall's rule 7. Embryological & surgical anal canal 8. Imperforate anus
25.	PELVIC DIAPHRAGM , FASCIA, VESSELS and NERVES	Pelvic diaphragm: Components 1. Attachments 2. Relations 3. Actions 4. N.apply: Sacral plexus and lumbosacral trunk 5. Internal iliac artery	6. Tear of lev. Ani-childbirth episiotomy	7. Branches of external and internal iliac arteries 8. Role of levator ani in childbirth 9. Urinary stress incontinence due to weakening of pelvic diaphragm
26.	JOINTS AND LIGAMENTS OF THE PELVIS	A. Pubic symphysis: Classification and function B. Sacroiliac joints: 1. Classification 2. Ligaments 3. Relations 4. Applied anatomy		

SECTION – II
(Course Content under Level – I, II, III)
DISSECTION-INCISIONS



DISSECTION

Learning Objectives of Dissection

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
1.	ANTERIOR ABDOMINAL WALL	<ul style="list-style-type: none"> Place the body in a supine position & give incisions 3,4,8 & 9. While giving 	<ul style="list-style-type: none"> Various planes, their levels & various abdominal regions. Pubic symphysis, 			<ul style="list-style-type: none"> Muscles of Anterior Abdominal Wall Superficial inguinal ring. 	Actions of these muscles. Various planes & their levels(draw yourself) Name abdominal regions & abdominal

		incisions 8 encircle the umbilicus <ul style="list-style-type: none"> Extend incision 9 posteriorly along the iliac crest Reflect the skin flaps leaving the sup.fascia on AAW Transverse section through superficial fascia from ASIS to median plane Separate memb layer from E.O. aponeurosis. Divide sup. Fascia vertically in median planes & in line of post.axillary fold Separate sup.fascia by blunt dissection. Note the direction of fibres of EO. & define its attachments Divide EO from costal margin to iliac crest & reflect it medially. Note direction of fibres of IO. Divide IO from costal margin to iliac crest, reflect it medially & separate it from Transversus abdominis. 	Pubic tubercle, Anterior superior iliac spine <ul style="list-style-type: none"> Supf. Fascia: its two layers (fatty and membranous) in the infraumbilical region. Superficial Inguinal ring (superolateral to Pubic Tubercle) in EOA. Structures emerging through it: - Spermatic cord in male. - Round ligament of uterus in female Ext. oblique Int. oblique Transversus abdominis Conjoint tendon Veins of the anterior abdominal wall. 	Attachments of AAW muscles	Ant. Cut.br. of IHN piercing E.O.A. a short distance sup. To supf. Inguinal ring. <ul style="list-style-type: none"> Lat. cut Nerves Cut. Veins 	<ul style="list-style-type: none"> Spermatic cord. viscera occupying them.
APPLIED ASPECTS						
<ul style="list-style-type: none"> Paracentesis abdominis Caput medusae SVC blockade - Lateral thoracic vein Ultrasonography Abdominal incisions 						

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
2.	RECTUS SHEATH	<ul style="list-style-type: none"> Open anterior layer of Rectus sheath medially along middle 	<ul style="list-style-type: none"> Anterior Layer of Rectus Sheath. 			<ul style="list-style-type: none"> Rectus sheath Rectus abdominis Sup. & inf. Epigastric vs. 	<ul style="list-style-type: none"> Formation of R.S at different levels Tendinous intersections Actions of RA

		<ul style="list-style-type: none"> of R.ectus Abdominis muscle • Detach it from the tendinous intersections. • Reflect ant. Layer of R.S. medially & laterally. • Lift R.A. & identify intercostal Ns. & subcostal Ns. • Divide R.A. transversely at the middle & turn the parts sup. & inf. And identify 	<ul style="list-style-type: none"> • Rectus abdominis • Pyramidalis, if present • Posterior layer of Rectus Sheath. • Superior & inferior. Epigastric veins. • Arcuate line • Linea alba • Linea semilunaris • Linea semicircularis 	<ul style="list-style-type: none"> • Intercostal Ns. • Subcostal nerve 	<ul style="list-style-type: none"> • Arcuate line • Linea semilunaris
APPLIED ASPECTS					
<ul style="list-style-type: none"> • Umbilical hernia • Paraumbilical hernia • Epigastric hernia • Rationale of ant. Abdo.wall incisions. • Reflection of R.A. laterally • Divarication of recti • Abdominal paracentesis 					

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
3.	TESTIS AND SPERMATIC CORD	<ul style="list-style-type: none"> • Make a long incision extending from supfl. Ring through anterolateral aspect of scrotum • Reflect the dartos from the skin • Reflect dartos from loose articular tissue deep to it. • Lift testis & spermatic cord from the scrotum. • Cut the spermatic cord at the sup. ring & remove it along with testis. • Clean and trace blood vs. into testis • Free tail and body of epididymis from the testis. • Make a transverse incision through the testis examine it with a hand lens & identify 	<ul style="list-style-type: none"> • Spermatic cord & structures in it esp. ductus deference & testicular artery. • Epididymis • Dartos • Scrotum and its nerve supply • Epididymis and its various parts • Sinus of epididymis (opens laterally) • Mediastinum testis • Penis- parts • Vessels and nerves of the penis • Penile urethra • TS of the penis 	<ul style="list-style-type: none"> • Coverings of spermatic cord & testis. • Testicular vein formation • Genitofemoral nerve and cremasteric reflex 	<ul style="list-style-type: none"> • Testis and its normal orientation & side determination • Sinus of epididymis 	<ul style="list-style-type: none"> • Spermatic cord • Ductus deferens • Testis • Epididymis 	<ul style="list-style-type: none"> • Coverings of spermatic cord and testis • Descent of testis
APPLIED ASPECTS							
						<ul style="list-style-type: none"> • Hydrocoele • Incomplete descent of testis • Ectopic testis • Vasectomy • Torsion of the testis 	

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
4.	INGUINAL	<ul style="list-style-type: none"> • Study the 	<ul style="list-style-type: none"> • Boundaries of 			<ul style="list-style-type: none"> • Inguinal 	<ul style="list-style-type: none"> • Coverings of

CANAL	formation of the inguinal canal	inguinal canal - Ant. wall - Post. wall - Floor - Roof. • Openings: Inguinal ring in EOA superolat. To P.T -Deep ing. Ring in F.T. • Structures passing through superficial inguinal ring: - spermatic cord in males - round lig. of uterus in female • Fascia transversalis	• Ilioinguinal N • Iliohypogastric nerve • Umbilical hernia	• Compare inguinal hernia with femoral hernia • Hasselbach's triangle • Ventral incisional hernia	ligament • Sup. Ing. Ring • Deep ing. ring • Spermatic cord in males • Round lig. in females • Conjoint tendon	different types of hernia • Direct Vs Indirect inguinal hernia • Factors preventing inguinal hernia		
							APPLIED ASPECTS	
							• Inguinal herniae • Anatomical consideration in repair of hernia	

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
5.	DISSECTION OF THE LOIN: EXPOSURE OF THE KIDNEY FROM THE BACK	<ul style="list-style-type: none"> Place the body in the prone position Follow inf. part of lat. Dorsi to iliac crest Expose free post. border of ext. oblique & note the interval between the two muscles Reflect the lat. Dorsi nf. And Ext. oblique anteriorly. Expose int.oblique (post. part) and thoracolumbar fascia. Remove remains of lat. Dorsi & detach serr. Post from T.L fascia (post layer) Cut vertically through post layer from 12th rib to iliac crest and transverse at upper and lower ends. Reflect the layer and expose erector spinae Pull erector spinae medially & follow middle layer of the T.L.F ant to the muscle Define 	<ul style="list-style-type: none"> Lat dorsi Ext. oblique Lumbar triangle of petit Int. oblique Erector spinae Quadratus lumborum Subcostal Iliohypogastric Ilioinguinal 	<ul style="list-style-type: none"> Thoracolumbar fascia (post. layer) Thoracolumbar fascia (post layer) Subcostal N Iliohypogastric N Ilioinguinal N 		<ul style="list-style-type: none"> Muscles -Lat dorsi -Int. oblique -Eretor spinae -Q. lumborum Fascia - TLF Nerves -Subcostal -Iliohypogastric -Ilioinguinal Triangle -Lumbar triangle Lower pole of kidney 	<ul style="list-style-type: none"> Arrangement & attachments of Thoraco Lumbar fascia
APPLIED ASPECTS							

	<p>attachments of middle layer of thoracolumbar fascia and cut through its sup. Med. & inf. Attachments & reflect it laterally</p> <ul style="list-style-type: none"> • Push Quad lumborum medially & feel post surface of ant. layer by finger • Divide ant. layer & expose lower part of kidney & nerves running over postr. Surface of kidney. 				<ul style="list-style-type: none"> • Renal angle: incision pleura • Bimanual palpation of kidney • Lumbar hernia through lumbar triangle
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S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
6.	PERITONEUM AND DISPOSITION OF THE VISCERA IN SITU	<ul style="list-style-type: none"> • Cut parietal peritoneum transversely at umbilicus and turn upper and lower parts sup. & inf. Respectively • Examine and identify ligaments in infraumbilical portion from deeper aspects. • Identify various abdo. Organs in situ, • Identify • Pull stomach down & to left and liver up and to right. • Identify epiploic foramen. Pass index and middle fingers of left hand through it. 	<ul style="list-style-type: none"> • Parietal peritoneum • Vertical disposition Rt. Of GB. Lt of GB • Horizontal disposition E. foramen. Umb. Pelvic . • Ligamentum teres • Falciform ligament. • Greater sac • Lesser sac • Compartments - Supracolic - Infracolic • Greater omentum • Lesser omentum - parts • Epiploic foramen & its boundaries • Omental bursa and parts • Transverse mesocolon 	<ul style="list-style-type: none"> • Median umb. Lig. 	<ul style="list-style-type: none"> • Medial umb. Lig • Lat. Umb. Lig • Internal hernias 	<ul style="list-style-type: none"> • Parietal peritoneum • Peritoneal ligs. Falciform Lig. teres • Peritoneal reflections -Gr. Omentum & parts -Lesser omentum & parts • Abdo. Organs in situ Supracolic compt • Epiploic for. 	<ul style="list-style-type: none"> • Peritoneum & its reflections • Def. & examples of -Omentum - Mesentry - Ligaments
						APPLIED ASPECTS	
						<ul style="list-style-type: none"> • Peritoneal efusion • Paracentesis • Peritonitis • H.R. pouch • Peritoneal spaces • Peritoneal recesses • Pouch of douglas 	

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
7.	SPLEEN	<ul style="list-style-type: none"> • Palpate the spleen in the left hypochondrium • Push stomach to right and identify upper part of greater curvature. 	<ul style="list-style-type: none"> • Spleen • Anatomical position • Impressions on visceral surface • Ligaments of 	<ul style="list-style-type: none"> • Gastrosplenic ligament(GSL). 		<ul style="list-style-type: none"> • Spleen and its anatomical position • Impressions on its visceral surface • Hilum of 	<ul style="list-style-type: none"> • Peritoneal reflections of organ • Ligaments of spleen • Blood circulation through it

	<ul style="list-style-type: none"> Identify fold of peritoneum extending from there to hilum of spleen. Identify Vs. in GSL Push Tr. Colon downward on the left side including left colic flexure and push spleen upward toward left dome of diaphragm & note fold of peritoneum extending between spleen and Lt. Kidney Study the organ in situ. And note its relations Cut ligaments at hilum of spleen and remove the organ & study its gross features 	<ul style="list-style-type: none"> spleen Blood supply 	<ul style="list-style-type: none"> Short gastric Veins 	<ul style="list-style-type: none"> Linorenal ligament TS at L1 showing epiploic foramen & lesser sac 	<ul style="list-style-type: none"> spleen Functional aspects of the organ
APPLIED ASPECTS					
<ul style="list-style-type: none"> Palpation of spleen Splenomegaly - direction, costal arch. Referred pain in splenic rupture : Kehr's sign Splenectomy Accessory spleen Splenic puncture 					

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
8.	COELIAC TRUNK	<ul style="list-style-type: none"> Push liver upwards & trace the peritoneal reflection from liver to lesser curvature of stomach Cut and remove both layers of lesser omentum & identify blood Vessels. Trace Lt. Gastric vessels, coursing along lesser curvature Trace rt. Gastric vs. coursing along lower part of lesser curvature Follow Rt. Gastric art. To hepatic art Identify structures in lesser omentum(in its rt. Free margin) & note their positions Trace these 	<ul style="list-style-type: none"> Lesser omentum Coeliac trunk and its three branches <ul style="list-style-type: none"> -Lt. Gastric -Hepatic -Splenic Lt. Gastric Vs. Rt. Gastric Vs. Hepatic Art. Proper Three structures <ul style="list-style-type: none"> -Common hepatic art. -Portal vein -Bile duct Tortuous splenic art Common hepatic art Gastroduodenal art Rt. Gastric art. 		<ul style="list-style-type: none"> Coeliac ganglion 	<ul style="list-style-type: none"> Coeliac trunk and its three branches Branches of hepatic art. Splenic Vs. behind stomach 	<ul style="list-style-type: none"> Area supplied by coeliac trunk & its anatomical basis Course of hepatic art.
APPLIED ASPECTS							
<ul style="list-style-type: none"> oesophageal varices 							

		structures to porta hepatis & note their relations <ul style="list-style-type: none"> Identify splenic vs. behind stomach Clean and define branches of hepatic art proper 				
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S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
9.	STOMACH	<ul style="list-style-type: none"> Identify the organ in situ & note its gross features Identify peritoneal folds of stomach Note Vs in the greater omentum The 2 ligatures to right of pyloric splincter(some distance apart) Turn stomach along rt. Gastric and Rt. Gastroepiploic Vs to left side and then identify. Strip off peritoneum along lesser curvature & identify. Pull cardiac end down and tie 2 ligatures some distance apart and cut in between the 2 ligatures. Cut at pyloric end & remove 	<ul style="list-style-type: none"> Greater omentum Lesser omentum Structures forming stomach bed Parts: Fundus, body & pylorus Omental bursa Coeliac trunk and its branches Left kidney and the suprarenal Gross features Internal features: Mucosal folds: Rugae. Blood supply and nerve supply Lymphatic drainage 	<ul style="list-style-type: none"> Gastroepiploic Vs. (Rt & Lt) Rt. & Lt. Vagi Lt. Gastroepiploic art 	<ul style="list-style-type: none"> Coeliac ganglia Short gastric arteries (5-7 in no.) 	<ul style="list-style-type: none"> Organ & its gross features Cardiac & pyloric ends & their differences Structures forming stomach bed. 	<ul style="list-style-type: none"> Anatomical disposition Peritoneal relations Blood supply Lymphatic drainage
						APPLIED ASPECTS	
						<ul style="list-style-type: none"> Gastro colic reflex Gastric ulcers Barium meal study Endoscopy Anatomical basis of vagotomy & types Ca. Stomach and its spread 	

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
10.	MESENTERIC VESSELS	<ul style="list-style-type: none"> Turn transverse colon & its mesocolon upwards Expose and identify mesentery of small intestine Trace oblique attachment of mesentery on 	<ul style="list-style-type: none"> Tr. Colon & mesocoln Mesentery of small intestine Sup. Mesenteric 			<ul style="list-style-type: none"> Sup. Mesentric art. & its branches Inf. Mesentric art. & its branches Marginal art Mesenteric group of lymph nodes 	<ul style="list-style-type: none"> Portion of gut supplied by SMA on embryological basis Portion of gut supplied by IMA on smbryological basis Anastomosis between brs. of SMA & IMA

	<ul style="list-style-type: none"> the post. abdo wall • Turn small intestine to the left • Cut through Rt. Layer of peritoneum of mesentery & expose sup. Mesenteric Vs. • Identify SMV to the right of the artery • Turn small intestine & its mesentery to the right. • Remove peritoneum & fat on post. abdo. Wall between mesentery & descending colon & expose inf. Mesenteric Vs. • Identify inf. Mesenteric vein to the left of art. • Trace and identify marginal artery 	<p>Vs.</p> <ul style="list-style-type: none"> • Inf. Mesenteric Vs. 	<ul style="list-style-type: none"> • Branches from SMA -Inf. Pancreatico-duodenal. -Jejunal & ileal (12-15) -Ileocolic(cont) -Rt. Colic -middle colic 	<ul style="list-style-type: none"> • Mesenteric group of lymph nodes 	
			<ul style="list-style-type: none"> • Branches from IMA -Left colic -Sigmoidal (2-3) -Sup rectal • Marginal artery of Drummond 		
					APPLIED ASPECTS
					<ul style="list-style-type: none"> • Marginal art. Of drummond • Resection of L.intestine and end to end anastomosis of arteries • Critical point of Sudeck

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
11.	LARGE INTESTINE	<ul style="list-style-type: none"> • Study large intestine in situ & note its cardinal features • Note the peritoneal covering of large intestine • Clean & define caecum & turn it upwards • Identify appendix & note its position • Note convergence of all taenia to base of caecum • Cut. Lat wall 	<ul style="list-style-type: none"> • Large intestine & its various parts: Caecum & appendix Asc. Colon Tr. Colon Desc. Colon Sigmoid/pelvic colon Rectum Anal canal • Tr. Mesocolon sigmoid mesocoln • Caecum • Appendix & its position • Ileocaecal orifice • Appendicular orifice 	<ul style="list-style-type: none"> • Post relations of caecum • Mesoappendix • Appendicular artery • Structures behind apex <p>Left ureter Div. of lt. CI artery</p>		<ul style="list-style-type: none"> • Large intestine & its various parts • Post. relations of caecum • Appendix & its position • Peritoneal coverings Tr. Mesocolon. Sigmoid mesocolon 	<ul style="list-style-type: none"> • Embryological basis of blood supply of large intestine • Peritoneal relations of large intestine • Vertical disposition • Horizontal disposition

		<ul style="list-style-type: none"> of caecum wash & identify • Divide peritoneum along lateral margin of descending colon & turn colon medially. Note attachment of sigmoid mesocolon • Tie two ligatures at junction of desc.colon & sigmoid colon. Divide colon between these ligatures • Remove large intestine & wash it • Take about 6" piece of large intestine & open it longitudinally & examine its interior. 				<p style="text-align: center;">APPLIED ASPECTS</p> <ul style="list-style-type: none"> • Differential diagnosis of lump in Rt. Iliac fossa • Appendicitis & Mcburney's point • Muscle cutting and muscle splitting incisions for appendicectomy • Ca.colon & resection of colon • Gastro-colic reflex • Meckel's diverticulum • Blood supply of appendix (tip)
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S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
12.	SMALL INTESTINE	<ul style="list-style-type: none"> • Pull duodenojejunal flexure downwards • Tie two ligatures at the DJ flexure some distance apart(1") • Cut small intestine between two ligatures 2 inches proximal to iliocaecal junction & cut the small intestine • Cut along the mesentery along its attachment on post.abdo.wall. • Remove the small intestine and flush its lumen thoroughly • Cut a piece of jejunum & ileum along with mesentery 	<ul style="list-style-type: none"> • Duodenojejunal junction <p>Small intestine -Jejunum -Ileum</p> <ul style="list-style-type: none"> • Arterial supply pattern Arterial arcades Arterial windows <ul style="list-style-type: none"> • Pliaca circularis • Payer's patches in ileum 		<ul style="list-style-type: none"> • Suspensory lig. of Treitz. 	<ul style="list-style-type: none"> • D.J junction. • Jejunum • Ileum • Mesentery of small intestine • Arterial supply -pattern of jejunum & ileum 	<ul style="list-style-type: none"> • Differences between jejunum & ileum -Extramural -Mural -Intramural • Proximal /distal end of a loop of intestine - coming out of the incision site by tracing the mesentery • Functional aspect of arterial supply & differences
						APPLIED ASPECTS	
						<ul style="list-style-type: none"> • Paralytic ileum • Meckel's diverticulum 	

		(about 6 inches length) <ul style="list-style-type: none"> • Study both parts and note their differences • Open jejunum & ileum along their anti mesenteric border & study the interior. 			
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S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
13.	PANCREAS AND DUODENUM	<ul style="list-style-type: none"> • Turn tail and body of pancreas to right • Strip splenic vessels from its post. surface • Divide bile duct near sup. Part of duodenum & remove duodenum & pancreas as one piece • Make 2 cuts on post. surface parallel to sup. & inf. margins of the body of pancreas • Tease away lobules of gland between the cuts to expose greyish white main pancreatic duct & note its tributaries (herring bone pattern) • Expose acc. Duct & its tributaries in head of pancreas. • Follow both ducts duodenum. Cut open the duodenum along its Rt. Wall vertically & wash it. Identify the openings on the internal surface of posteromedial part of II part of duodenum 	<ul style="list-style-type: none"> • Identify the duodenum & pancreas in situ. • Different parts of duodenum & post. relations of III part. • Different parts of pancreas • Duodenal fossae • Main pancreatic duct. (of Wirsung) • Major duodenal papilla 	<ul style="list-style-type: none"> • Acc. Pancreatic duct (of Santorini) • Minor duodenal papilla 		<ul style="list-style-type: none"> • Duodenum (all parts) • Pancreas • Major pancreatic duct • Major duodenal papilla 	<ul style="list-style-type: none"> • Peritoneal relations of duodenum & pancreas • Blood supply on developmental basis.
						APPLIED ANATOMY	
						<ul style="list-style-type: none"> • Duodenal ulcer • Duodenal cap in barium meal supply • Acute & chronic pancreatitis • Varicocoele • ERCP - Endoscopic visualisation of the openings of the bile duct and the pancreatic ducts. • Common sites of cancer 	

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
14.	PORTAL VEIN	<ul style="list-style-type: none"> • Lift tail of pancreas from spleen & 	<ul style="list-style-type: none"> • Pancreas 			<ul style="list-style-type: none"> • Veins -Inf. Mesenteric -Splenic 	<ul style="list-style-type: none"> • Formation of portal vein • Portal system of

		separate body of pancreas from posterior abdominal wall <ul style="list-style-type: none"> Identify splenic vein over posterior surface of pancreas Clean & trace splenic vein to the junction with SMV behind the neck of pancreas & note the beginning of portal vein Follow IMV & note its termination Trace various tributaries of portal vein 	<ul style="list-style-type: none"> Splenic vein. Sup. Mesenteric vein Portal vein 	<ul style="list-style-type: none"> Termination of IMV Tributaries of portal vein 	-Sup. Mesenteric -Portal <ul style="list-style-type: none"> Tributaries of portal vein 	circulation <ul style="list-style-type: none"> Portal hypertension
APPLIED ASPECTS						
<ul style="list-style-type: none"> Portocaval anastomosis & its applied anatomy -Esophageal varices -Caput medusae -Haemorrhoids Portocaval shunts 						

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY		
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND	
15.	LIVER & GALL BLADDER	<ul style="list-style-type: none"> Identify and feel Pull liver down and cut layers of left triangular & coronary ligaments Cut the structures at the porta hepatis Identify & feel IVC & cut it above & below the liver Remove the liver along with segment of IVC 	<ul style="list-style-type: none"> Liver & gall bladder in situ Ligaments of liver Lig.teres Coronary lig. Rt. & Lt triangular lig. Anatomical position Anatomical lobes Physiological lobes Fissures for Lig. teres Lig. venosum Gall bladder and its various parts Porta hepatis & groove for IVC Arrangement of atructures at porta hepatis. Bare area Fossa for the gall bladder 	<ul style="list-style-type: none"> Structures related to inf. And post. surface Vascular segments Hepatic circulation 			<ul style="list-style-type: none"> Liver and its parts Gall bladder Various components of extrahepatic biliary apparatus 	<ul style="list-style-type: none"> Peritoneal reflection on the liver 1 Bare area of liver Veins of Retzuis Supports of liver
APPLIED ASPECTS								
<ul style="list-style-type: none"> Hepatomegaly Palpation of the liver Liver biopsy Hepatorenal pouch Gall stones (Predisposing factors) Calot's triangle 								

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
16.	KIDNEYS AND SUPRARENALS	<ul style="list-style-type: none"> Remove fat and fascia from ant. 	<ul style="list-style-type: none"> Kidneys & suprarenals in situ. 			<ul style="list-style-type: none"> Kidneys and suprarenals 	<ul style="list-style-type: none"> Renal fascia 7 other coverings of kidneys

	<ul style="list-style-type: none"> • surface of kidneys and suprarenals • Clean & trace ureters • Mobilise both the kidneys & turn them medially • Separate suprarenals from renal fascia & note their relations • Remove suprarenals and note. • Cut ureter at lower pole of kidneys & renal vessels 2cm from the hilum and remove them • Study post. relations • Cut one kidney along its lateral border into two equal halves(ant. & post) and study the cut section with the help of diagram 	<ul style="list-style-type: none"> • Renal vessels • Termination of Lt. Suprarenal & Lt gonadal veins in Lt. Renal vein • Kidneys: position, coverings and relations • Ureter: Course, relations, normal constrictions and blood supply • Lymphatic drainage of the kidneys and the ureter • Relations of suprarenals in situ • Differences in shapes of suprarenals • Determine the side & anatomical position • Coronal section: Cortex, medulla, pyramid, calyces, pelvis of ureter 	<ul style="list-style-type: none"> • Branch to Lt. Suprarenal • Suprarenal arteries • Positions of suprarenal veins • Vascular segments 	<ul style="list-style-type: none"> • Branch to ureter • Brodal's line 	<ul style="list-style-type: none"> • Side determination of kidney • Differences between suprarenals • Post. relations of kidneys • Supports of kidneys. • Anatomical basis of: <ul style="list-style-type: none"> -Floating kidney -Polycystic kidney -Pelvic kidney -Horseshoe shaped kidney
APPLIED ASPECTS					
<ul style="list-style-type: none"> • Renal angle • Palpation / percussion of the kidney (bimanual) • Differentiation of renal enlargement from splenic enlargement • Surgical approach to kidney & ureter • Pyelography & its indications • Renal / ureteric coli • Varicocoele. • Renal infarction • Polycystic kidney 					

No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
17.	POSTERIOR ABDOMINAL WALL	<ul style="list-style-type: none"> • Clean the post. abdo. Wall & denude it from all fascia and identify • Clean muscles of post. abdo.wall & identify them • Clean & trace nerves on posterior abdominal wall • Dissect the lumbar 	<ul style="list-style-type: none"> • IVC & its tributaries • Abdo.aorta & its branches • Sympathetic trunk on either side of aorta • Quadratus lumborum • Psoa major & minor • Iliacus • Subcostal iliohypogastric • Ilioinguinal • Femoral • Obturator • Lumbosacral 	<ul style="list-style-type: none"> • Azygos vein • Hemiazygous vein • Genitofemoral 	<ul style="list-style-type: none"> • Cisterna chyli & continuation upwards as thoracic ducts • Lat.cut.N of thigh 	<ul style="list-style-type: none"> • Structures in post.abdo.wall. • Muscles: Q.lumborum P. major Iliacus • Nerves Symp. Trunk Femoral Obturator • Aorta & its branches • IVC & its tributaries 	<ul style="list-style-type: none"> • Arrangement of abdominopelvic fascia on post. abdo. wall
APPLIED ASPECTS							
<ul style="list-style-type: none"> • Caries spine • Psoas abscess • Meralgia parasthetica • IVC obstruction 							

		plexus	trunk		
			<ul style="list-style-type: none"> Cysterna chyli 		

No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
18.	RESPIRATORY DIAPHRAGM	<ul style="list-style-type: none"> Strip parietal peritoneum from the undersurface of diaphragm & identify various parts & openings of diaphragm Clean & define attachments of crura Clean and define arcuate ligaments Clean and define major openings in diaphragm with structures passing through them Work out their levels in relation to thoracic spines Explore various other minor openings & structures passing through them 	<ul style="list-style-type: none"> Respiratory diaphragm & its rt. & lt. Domes and central tendon Crura of diaphragm Med. & lat. Arcuate ligaments IVC opening (in central tendon) Oesophageal opening (in rt. Crura) Aortic opening (behind median arc. Lig) IVC -T8 Oesophagus - T10 Aortic - T12 	<ul style="list-style-type: none"> Structures passing through them Opening for sup. Epigastric vessels Subcostal Vs. & N Symph trunk Splanchnic nerves 	<ul style="list-style-type: none"> Median arcuate ligament Opening for musculophrenic Vs. Lower 5 intercostal N Hemiazygous v. 	<ul style="list-style-type: none"> Respiratory diaphragm and its various components Major openings in diaphragm 	<ul style="list-style-type: none"> Actions of diaphragm Developmental anatomy of diaphragm Nerve supply
						APPLIED ASPECTS	
						<ul style="list-style-type: none"> Diaphragmatic herniae Paralysis of diaphragm: injury to phrenic nerve 	

No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
19.	UROGENITAL TRIANGLE: ISCHIORECTAL FOSSA; ANAL TRIANGLE AND ANAL CANAL; PERINEAL POUCHES (PROSECTION ONLY)	<ul style="list-style-type: none"> Place the cadaver in prone position Expose lower border of Gluteus skin fascia from perineum.ext.anal sphincter. anococcygeal lig. & margins of anus Trace & define boundaries of ischioanal fossa Expose & clean post. margin of perineal memb. & 	<ul style="list-style-type: none"> Gluteus maximus Sacrotuberous lig. Location & extent of ischioanal fossa 	<ul style="list-style-type: none"> Inf. Rectal N & Vs in the fossa Post. scrotal /labial N & 	<ul style="list-style-type: none"> Gluteal branches of PCN of thigh Perineal branch of S4 	<ul style="list-style-type: none"> Boundaries extent & locations of ischioanal fossa Inf. rectal N & Vs 	<ul style="list-style-type: none"> Fascial arrangement in ischioanal fossa Formations of pudendal canal Hiatus of schwalbe
						APPLIED ASPECTS	

	<ul style="list-style-type: none"> identify Trace inf. Rectal N & Vs to lat. Wall of fossa Remove all fat from the fossa Clean and define pudendal canal on lat. Wall of fossa Remove all fat from the fossa Clean and define pudendal canal on lat. Wall of fossa 	<ul style="list-style-type: none"> Vs Pudendal canal Pudendal nerve Internal pudendal vessels. 	<ul style="list-style-type: none"> Ischioanal abscess Pain Drainage Ischiorectal hernia
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S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
20.	URINARY BLADDER AND PROSTATE	<ul style="list-style-type: none"> Define peritoneal reflection in relation to UB & identify Remove peritoneum from Sup.surface of bladder One table in each row Median incision through pubic symphysis and sacrum & coccyx This will divide Bladder & rectum in males Bladder, uterus & rectum in females (Male cadavers) On other tables remove bladder along with prostate, separating it all around and perineum. Separate structures all around preferably by hand or by blunt dissection Open bladder by incision along the junction of sup. & inferolat. Surfaces on both sides & identify Clean fascia around it & study Open prostate by incising it through pros. Urethra and 	<ul style="list-style-type: none"> UB in situ. Rectovesical pouch in male Rectouterine & uterovesical pouches in female Shape and position Study gross features of UB Trigone of bladder Opening of ureters Int. urethral meatus Gross features of prostate & capsules Lobes of prostate Uvula vesicae Urethral crest Prostatic sinus Blood supply & lymphatic drainage of the urinary bladder, prostate, seminal vesicles Vas deferens 	<ul style="list-style-type: none"> Identify & study post. relations of bladder in both sexes Prostatic utricle Colliculus seminalis Openings of ducts of prostate in prostatic sinuses 	<ul style="list-style-type: none"> Openings of ejaculatory ducts 	<ul style="list-style-type: none"> Urinary bladder & prostate Gross features of both together Trigone of bladder Openings of ureters Int. urethral meatus 	<ul style="list-style-type: none"> Peritoneal reflections over urinary bladder Prostatic venous plexus Ejaculation
						APPLIED ASPECTS	
						<ul style="list-style-type: none"> Benign hypertrophy of prostate, symptoms with anatomical explanation- Frequency, urgency, hesitancy, precepancy, feeble stream Ca. Prostate an its spread Anatomical considerations in prostatectomy - abdominal /transurethral Cystoscopy Cystotomy Retrograde ejaculation after prostatectomy, patient is sterile but potent Stricture of the urethra Rupture of th urethra Functionally abnormal bladder 	

S.No	TOPIC	DISSECTION STEPS	WHAT IS EXPECTED FROM THE STUDENTS			SUMMARY	
			MUST KNOW	SHOULD KNOW	COULD KNOW	IDENTIFY	UNDERSTAND
21.	REMOVAL OF UTERUS	<ul style="list-style-type: none"> Clean and identify female genital organs in situ Trace peritoneal reflections in pelvis & identify Identify structures in relation to broad lig Separate sides and back of cervix and identify Separate vagina from the perineum Remove uterus along with fallopian tube & ovaries after cutting broad ligaments 	<ul style="list-style-type: none"> Uterus: parts and position Cervix of the uterus Fallopian tubes Ovary Rectouterine pouch Uterovesical pouch Broad ligament Ligaments of ovary Round lig. of uterus Uterine artery Uterus and the adnexa. Blood supply, lymphatics and nerve supply of the uterus, fallopian tube and the ovary. 	<ul style="list-style-type: none"> Transverse cervical ligaments Uterosacral ligaments 		<ul style="list-style-type: none"> Female genital organs Uterus Fallopian tubes Ovary Vagina Peritoneal folds Pouches & ligaments Broad ligaments Lig. of ovary Round lig. of uterus Rectouterine pouch Uterovesical pouch Contents of broad lig. 	<ul style="list-style-type: none"> Peritoneal reflections over uterus in pelvis Normal position anteversion anteflexion supports of uterus
						APPLIED ASPECTS	
						<ul style="list-style-type: none"> Prolapse of uterus Tubectomy Krunkenberg tumour Pap smear Gravid uterus /involution Douglas's pouch, podt, fornix - drainage, IVF (Visualisation of ovary) Laproscopy 	

SECTION – II
(Course Content under Level – I, II, III)
TUTORIALS

OUTLINE OF TUTORIALS

S.No	TOPIC	MUST KNOW	SHOULD KNOW	COULD KNOW
1.	LUMBAR VERTEBRAE	<ol style="list-style-type: none"> Distinguishing features - Body, vertebral arch (Transverse process, Spinous process, superior and inferior articular process, vertebral canal) Feweet's method of identifying lumbar vertebrae Identifying features of L5 vertebra and muscle attachments 	<ol style="list-style-type: none"> Mamillary process and accessory process Muscle attachments - Psoas, quadratus lumborum, Crus of diaphragm, Lamella of thoracolumbar fascia, Erector spinae, Supraspinous ligaments, Interspinous ligaments Lumbar puncture 	

2.	SACRUM	<ol style="list-style-type: none"> 1. Normal anatomical position 2. Parts, Surfaces 3. Sacral foramina 4. Sacral crest 7. Sex differences 	<ol style="list-style-type: none"> 5. Muscle attachments - Piriformis, Iliacus, coccygeus, gluteus maximus, Sacrotuberous ligament 6. Course of ventral and dorsal rami of sacral spinal nerves 	8. Sacral index
3.	VERTEBRAL COLUMN	<ol style="list-style-type: none"> 1. Identifying features of lumbar, thoracic and cervical vertebra. 2. Length of column in males and females. 3. Functions 4. Primary and secondary curvatures 6. Movements of vertebral column in various regions 10. Intervertebral disc-Number, parts of disc, constituents of disc, functions 	<ol style="list-style-type: none"> 5. Causes of Primary and secondary curvatures 11. Disc prolapse 	<ol style="list-style-type: none"> 7. Abdominal curvatures of -Kyphosis, Lordosis, Scoliosis 8. Spondylolisthesis 9. Line of weight transmission
4.	PELVIS	<ol style="list-style-type: none"> 1. Bones forming pelvis 2. Normal anatomical position 3. Greater pelvis/ Lesser Pelvic 4. Pelvic Inlet /pelvic outlet 5. Pelvic inclination 6. Structures crossing pelvic brim 7. Structures passing through greater and lesser sciatic notch 11. Sex differences 	8. Pelvimetry - Obstetrical conjugate diameter	<ol style="list-style-type: none"> 9. contracted Pelvis 10. Types of pelvis

RADIOLOGICAL ANATOMY: Plain X-Rays , Contrast X-Rays showing parts of GIT and Urinary systems.
CT scans of the abdomen at the epiploic foramen, transpyloric plane and L4