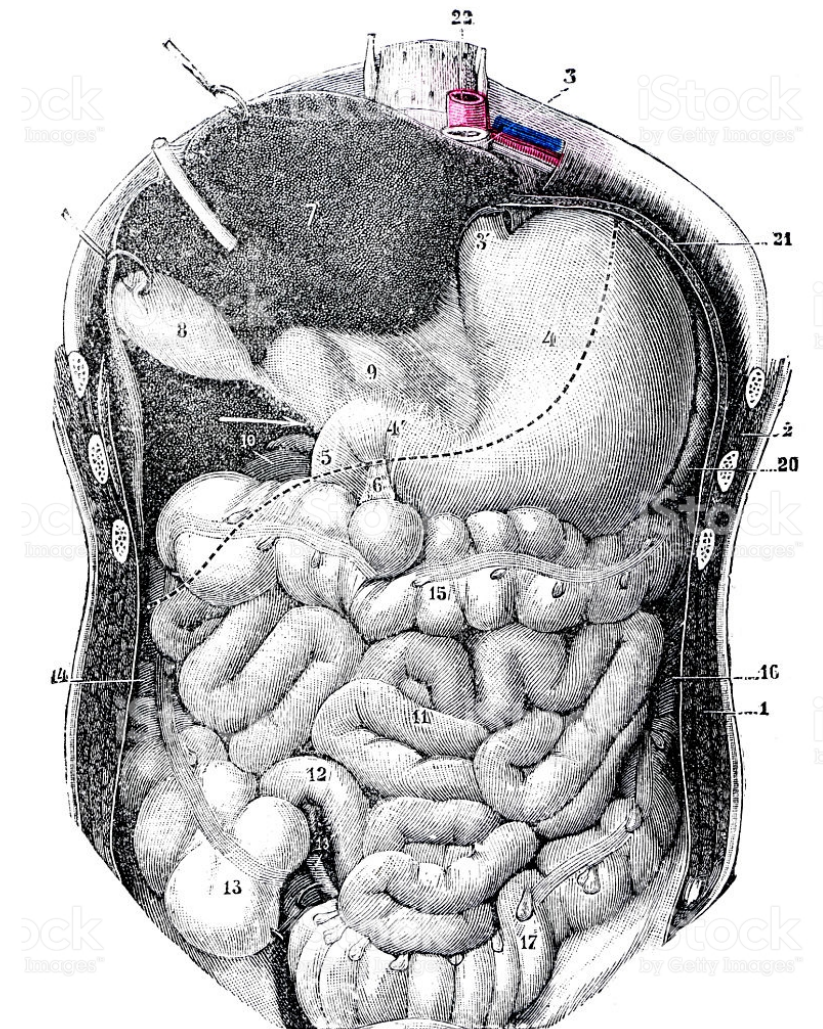


ACEM Primary Examination Vivas > Anatomy > Abdomen & Pelvis	
Organised by edvivas.com	
Title	Page
Abdo CT 2016-2-D	3
Abdo CT 2015-2-D	4
Abdo CT 2015-1-A	5
Abdo CT 2013-1	6
Abdo CT 2010-1	7
Abdo CT 2009-1	8
Abdo CT 2008-2	9
Abdo CT 2006-2	10
Abdo CT 2006-2	11
Abdomen Photo 2011-2	12
Abdominal Vessels 2006-2	13
Abdominal Vessels 2014-1-A	14
Abdominal X Ray 2015-2-A	15
Abdominal X Ray 2014-1-B	16
Abdominal X Ray 2011-2	17
Abdominal X Ray 2007-1	18
Abdominal X Ray 2005-2	19
Aortic Branches 2013-A	20
Aortic Branches 2012-2	21
Aortic Branches 2010-2	22
Aortic Branches 2009-2	23
Aortic Branches 2003-2	24
Female Pelvis 2017-2-D	25
Female Pelvis 2013-1	26
Female Pelvis 2010-1	27
Female Pelvis 2007-2	28
Liver 2017-1-C	29
Male Pelvis 2017-2-A	30
Male Pelvis 2014-2-B	31



Male Pelvis 2013-1	32
Male Urethra 2009-1	33
Pelvic bone 2016-1-C	34
Pelvis Photo 2008-2	35
Pelvis Photos 2009-2	36
Portosystemic anastomoses 2012-1	37
Posterior Abdominal Wall 2008-1	38
Posterior Abdominal Wall 2005-1	39
Posterior Abdominal Wall 2005-1	40
Transpyloric plane 2010-2	41
Ureters 2012-1	42
Ureters 2003-1	43
Vasculature 2009-1	44
Vasculature 2008-1	45
Vasculature 2007-1	46
Vasculature 2007-1	47

Abdo CT 2016-2-D

Stem: He has previously had a normal CT abdomen. Moving onto Anatomy.			
Question 3 Normal CT at transpyloric plane Subject: Anatomy LOA: 2	a. Name the structures on this CT.	Liver , portal vessels, R Kidney (top), aorta , IVC (not clearly differentiated), L kidney , spleen , splenic vein (not tortuous), bowel loops, pancreas, antrum. Vertebra, ribs, paravertebral muscles, intercostal and abdominal wall muscles, fat, skin	4 bold and 2 others
	b. Describe the arterial blood supply of the small and large intestine	The small intestine (jejunum and ileum) is supplied by the branches which arise from the superior mesenteric artery (ileal and jejunal aa). The large intestine is supplied by both the superior mesenteric (ileocolic, middle colic and right colic aa to the ascending and prox 2/3 of transverse colon) and the inferior mesenteric artery .(left colic, sigmoid aa & superior rectal aa). The duodenum is supplied by a branch of the coeliac trunk.	Bold to pass

Abdo CT 2015-2-D

Stem: Moving onto Anatomy. A CT abdomen is done to exclude renal obstruction as the cause of his renal failure			
Question 4 CT abdomen Subject: Anatomy LOA: 2	Identify the structures on this CT. (Axial image)	Liver , portal vessels, R Kidney (top), aorta L kidney , spleen, splenic vein (not tortuous), bowel loops, pancreas , IVC, Vertebra, ribs, paravertebral muscles, intercostal and abdominal wall muscles, fat, skin.	5 Bold + 2 others
	Describe the course of the ureters	Originate at renal hilum (PUJ) – approx. L2 Run inferiorly lying across psoas Near tips of transverse process of lumbar vertebra (L3 – L4) Cross over pelvic brim Cross anterior to bifurcation of common iliac artery Lie on lateral wall of pelvis Travel medially to bladder Short intramural path at VUJ	4/8 points to pass
	What are the 3 narrowest points of the ureters?	PUJ VUJ Pelvic brim	2 of 3

Abdo CT 2015-1-A

Stem: We will now move to Anatomy. An abdominal CT scan is done			
Question 4	Identify the structures visible.	<p>Liver, portal vessels, part of gallbladder (not obvious), R Kidney (top), diaphragms, aorta, IVC (not clearly differentiated),</p> <p>L kidney, spleen, splenic vein (not tortuous), bowel loops, pancreas, antrum.</p> <p>Vertebra, ribs, paravertebral muscles, intercostal and abdominal wall muscles, fat, skin.</p>	4 Bold + 2 others
CT abdomen			
Subject: Anat			
LOA: 2			

Abdo CT 2013-1

4. Abdo CT – relations of spleen	1. Identify the organs and structures seen in this CT scan of the abdomen	Liver Pancreas Spleen Aorta IVC Kidneys – L & R	Pass = 5/6 Prompt: Name the structures you can see in this CT scan	
	2. Describe the relationships of the spleen	1. lies deep to and along plane 9 and 11 ribs in left upper quadrant abdo 2. inferiorly left kidney and splenic flexure colon 3. superiorly and laterally diaphragm 4. medial stomach and pancreas 5. vascular supply splenic a. and veins lie deep		

Abdo CT 2010-1

4. Abdo CT – relations of liver	1. Please identify the relations of the liver as seen in this CT slice	1 chest wall and ribs 2 crus diaphragm 3 kidney and adrenal gland 4 IVC 5 duodenum 6 gallbladder		
	2. What is the blood supply of liver	1. hepatic artery 2. portal vein 3. 3 hepatic veins		
	3. What level do you think this CT slice is taken	1 probably L1	Prompt: SMA arises at L1	

Abdo CT 2009-1

TOPIC	QUESTION	ESSENTIAL KNOWLEDGE	NOTES
Question 1: (Photo)	Please identify the intra-abdominal structures visible in this CT scan	<p> Liver Duodenum Small bowel Spleen L and R kidney Aorta Crura of diaphragm Pancreas Splenic vein IVC </p> <p>If not already identified as pancreas..what is this structure?</p>	Need 6/10 to pass
Question 2: (Not related to photo)	What are the relations of the pancreas? You will not be able to see all of them.	<ul style="list-style-type: none"> Posteriorly...ivc, portal vein, r renal vein/artery, bile duct, sup mesenteric vessels, aorta, L2 vertebrae, L kidney and L adrenal Lateral to right...duodenum 'C' shape around head Lat to left...hilum of spleen Anteriorly...stomach, peritoneum, lesser omentum, bowel, sup and inf panc-duod arteries 	6 to pass

Abdo CT 2006-2

TOPIC	QUESTION	ESSENTIAL KNOWLEDGE	NOTES
Question 1: Xray: CT abdomen	a. Identify the intra-abdominal structures visible on this CT scan	Liver/ porta hepatis /duodenum/IVC / pancreas /splenic vein/ kidneys/spleen/ aorta/ coeliac trunk/ crus of diaphragm/ small bowel	Bold + 2 to pass
	b. Describe the relations of the right kidney (see diagrams Moore page 291-293,324)	Surrounded by peri-nephric fat Superiorly- R adrenal + liver+ portal vein Supero-laterally- Right lobe of liver Medially-Psoas + vertebrae Posteriorly- 12 th Rib + abdo muscles(TA, IO, EO),deep back muscles (erector spinae/quadatus lumborum) Anteriorly- gall bladder + duodenum + ascending colon Antero-medially-R renal vein + IVC, pancreas more anteriorly	Correct structures related in 3 directions to pass
Question 2:	a. Identify this bone, and identify the significant	a. Femur. appropriate side (head superomedially distal	a. Need all bold

Abdominal Vessels 2006-2

3. Photo – post adbo & pelvic walls – abdo aorta & iliac aa	1. Demonstrate the main structures shown on this photograph	Aorta IMA Common iliac aa Ext & int iliac aa L Femoral a IVC Common iliac vv L Femoral v R Testicular v Ureters Inguinal ligg		
	2. Describe the course and relations of the ureter			

Abdominal Vessels 2014-1-A

Stem: An elderly lady presents with acute abdominal pain. We are starting with Anatomy.			
TOPIC	QUESTIONS	KNOWLEDGE (essential in bold)	NOTES
Question 1 Photo of Abdominal wall (fig 258A) Subject: Anat LOA: 2	1 What structures in this photograph are potential sources of acute abdominal pain?	Aorta (aneurysm), Coeliac axis and SMA (mesenteric ischaemic), kidneys and ureters (stones/infarcts), Splenic artery (aneurysm/dissection), Lymph nodes (adenitis/pressure), psoas (abscess or bleed)	Bold
	2 Identify the (other) vascular structures in this photograph (<i>if not already</i>)	Landmarks and levels: IVC, left renal vein, right renal vein. Aorta, Coeliac axis (T12), superior mesenteric artery (L1).	4/6 bold
	3 Describe the arterial supply and venous drainage of the gut	Foregut (+hepatobiliary & spleen) - Coeliac axis: common hepatic (->cystic, hepatic, right gastric, gastro-duodenal), splenic, left gastric (not shown); Midgut (duodenum to transverse colon)-SMA: inferior pancreaticoduodenal, jejunal/ileal branches, ileocolic, right and middle colic. Hindgut-IMA (small calibre + collaterals, therefore rarely blocked). Venous drainage – superior mesenteric vein (joins splenic vein to form portal vein), inferior mesenteric vein	Bold

Abdominal X Ray 2015-2-A

Stem: Moving onto Anatomy. A KUB X-ray is performed			
Question 5 AXR - ureters Subject: Anat LOA: 2	1. Could you point out on the xray the course of the L ureter	From hila of kidney L1-2 , along transverse processes, just medial to tips of transverse processes of lumbar vertebrae , on ant surface of psoas muscles, pass over pelvic brim around SI joint, run along lateral wall of pelvis till ischial spine, then medially to enter bladder	Bold
	2. Where in the ureters is a stone likely to lodge	PUJ, pelvic brim, VUJ	2/3
	3. Where else could a stone be present	Kidneys, bladder	1/2
	4. (only if required) What other structures can you identify on the xray (not required for pass)	Liver, Large Bowel, Lumbar spine, Pelvis, Femoral heads, Ribs, Psoas	

Abdominal X Ray 2014-1-B

Question 1: X-ray Abdo CT	1. Identify the structures present in this CT of the abdomen with contrast.	Liver, spleen, kidneys, pancreas	At least 6 to pass (1 point only for kidneys)
	2. Which structures are retroperitoneal?	Pancreas, kidneys, aorta, IVC	At least 3 to pass
	3. Demonstrate the potential spaces for fluid collection in the supine position.	Hepatorenal space Splenorenal space	Need both to pass

Abdominal X Ray 2011-2

Stem: Moving now to your anatomy question. Where would you look for a stone causing this man's pain on this Xray?			
Question 4 AXR- abdomen (outlining ureters) Subject: Anat LOA: 2	1.Course of ureter	1. Hilum(~L2/Tips of Trans Ps of lumbar vert/pelvic brim at SI joint or thereabouts(bifurc of Common iliac art.)/Lat wall of pelvis toward ischial spine then medially to base of bladder	4 Bold
	2. Where is a stone likely to lodge? 3. Where would a staghorn calculus form? If have time – name other structures on XR	2. Narrowings of ureter: PUJ; Pelvic brim; VUJ 3. Hilum: Pelvis and calyces	2 of 3

Abdominal X Ray 2007-1

TOPIC: Abdo x ray/male genitalia _____ **NUMBER:** _____

OPENING QUESTION	Outline the course of the ureters on the Xray?	COMMENTS
POINTS REQUIRED	1) Hilum of R just below, L just above L1	3/4 for pass
	2) Run just inside the tips of transverse processes of lumbar vert, on surface of psoas	
	3) Over SI joint, lying on bifurcation of common iliac	
	4) To ischial spine, and thence to pubic tubercle	
PROMPTS		
SECOND QUESTION	Outline the expected course of the abdominal aorta?	2/3 to pass
	1) Entry into abdomen at T12	
	2) Left of midline	
	3) Bifurcation – just below umbilicus L4	
PROMPTS		
THIRD QUESTION (if needed)	What is the lymphatic drainage of male genitalia?	2/2 to pass
POINTS REQUIRED	1) Testicles- run back along test artery to para aortic nodes, lying along L2 level	
	2) Scrotal and penile skin, to inguinal nodes	
PROMPTS		

Abdominal X Ray 2005-2

TOPIC: X-ray Abdomen _____

NUMBER: 1.2 _____

OPENING QUESTION	Please demonstrate the major anatomical structures on this X-ray	COMMENTS
POINTS REQUIRED	1 Stomach	4/6 to pass
	2 Large bowel: Could you please identify the parts of the large bowel?	
	3 Psoas	
	4 Liver	
	5 Kidneys	
	6 Bones: ribs, spine, pelvis, femurs	
PROMPTS	Demonstrate where you would expect to find the solid organs.	
SECOND QUESTION (if needed)	On this Xray, please demonstrate the transpyloric plane.	
POINTS REQUIRED	Passes through the lower border of L1	Needed to pass
THIRD QUESTION (if needed)	What structures are defined by this plane ?	
POINTS REQUIRED	Pylorus but it is free on mesentery	5/10 to pass
	Pancreas- head, neck and body	
	Gallbladder- fundus	
	Spinal cord ends- Conus Medulla	
	Supracolic compartment lies above- Liver, spleen and fundus of stomach	
	Infracolic below- SI and Colon	
	SMA leaves Aorta	
	SV joins SMV > Portal vein	
	Hila of both kidneys	
	9 th costal cartilages at lat border rectus	

Aortic Branches 2012-2

<p>Question 4:</p> <p>Photo: Aorta/IVC/kidneys Major vessels, branches and course of</p>	<p>Identify the structures visible in this photo.</p> <p>Name the branches of the abdominal aorta</p> <p>Name the branches of the coeliac trunk and what do they supply</p>	<p>Kidneys, ureters, psoas major, diaphragm, adrenals, IVC 7, L renal vein 12, R renal v 23, aorta 1, celiac trunk 2, sup mesenteric art 28,</p> <p>Single - coeliac trunk, superior mesenteric artery, inferior mesenteric artery Paired –common iliacs, ovarian/testiculars, superior and inferior adrenals, right and left inferior phrenics, lumbar arteries</p> <p>Arises at T12, supplies liver, stomach, spleen, oesophagus and superior part of duodenum and pancreas branches are L gastric, common hepatic and splenic</p>	<p>8 to pass</p> <p>6 to pass</p> <p>Extra info</p>
--	---	--	---

Aortic Branches 2010-2

TOPIC 4	Abdominal Photograph	COMMENTS
QUESTIONS AND POINTS REQUIRED	Using the photograph as a guide, demonstrate the distal aorta and its branches: Inferior mesenteric Common, external and internal iliacs	All to pass
	What are the other branches of the abdominal aorta Single: coeliac, SMA Paired Visceral: renal, suprarenal, gonadal Paired Somatic: subcostal, inferior phrenic, lumbar	Coelica, SMA, renal to pass
	Can you find any of these on this photograph Gonadal	Bonus

Aortic Branches 2009-2

Opening stem: An 80 year old man presents with a leaking AAA and is to undergo Emergency Surgery

TOPIC	QUESTIONS	KNOWLEDGE (essential in bold)	NOTES
Anatomy: Photo - Abdominal Aorta / posterior abdominal wall	1. Identify and name the blood vessels in this image.	Aorta (1), common iliac arteries (3), femoral artery (9). IVC (23), Common iliac veins (4), External iliac arteries (7), External iliac veins (8), Internal iliac arteries (25), IMA (22), Femoral vein (12), lumbar artery (13), testicular vessels (39)	4 in bold PLUS 3 others to pass
	2. Identify the ureters and describe their course	Ureters (40) Origin at the renal hilum (PUJ); run inferiorly lying across the psoas (32) ; Lie medially to tips of the lumbar tps (on xray); Cross over the pelvic brim ; Cross anteriorly to the bifurcation of the common iliac artery; lie on the lateral wall of the pelvis, travels medially to bladder; short intramural path at VUJ	Correctly identifies ureters PLUS 3 points
	3. What are the narrowest points of the ureters?	Narrowings at the PUJ, VUJ, & pelvic brim	2 of 3 points

Aortic Branches 2003-2

<p>Question 5 Discussion Posterior abdomen, retroperitoneal compartment LOA: 2</p>	<p>Describe the course and branches of the abdominal aorta</p> <p>What is the relationship of the IVC to the aorta</p>	<p>aortic hiatus of diaphragm at T12 Ends at bifurcation to common iliac aa at L4 Branches: - Coeliac (T12), SMA (L1), IMA (L3); Suprarenal (L1), renal (L1), gonadal (L2); Subcostal (L2), Inferior phrenic (T12), Lumbar (L1-L4) (2 of minor branches) IVC: lies posterolateral and to the R. Leaves abdomen through caval opening of diaphragm at T8 Drains from lower limbs and non-portal blood Tributaries correspond to paired vessels of Ao</p>	<p>3 of bold, 1 of non-bold</p> <p>Behind and to the R</p>
---	--	--	--

Female Pelvis 2017-2-D

Stem: Moving onto Anatomy. A pelvic examination is performed.			
Question 4 Pelvis (Female Model MS1) Subject: Anatomy LOA: 1	(a) Using this model, identify the major anatomical structures.	Pubic symphysis, bladder, vagina, uterus, rectum, sacrum, external anal sphincter, ovary, fallopian tube, Broad ligaments, internal and external iliac vessels	5 to pass
	(b) Describe the course of the iliac arteries.	Common iliac origin from aorta L3 Follows medial border of psoas to pelvic brim Divides at level of L5-S1 Internal iliac artery enters pelvis External iliac artery follows iliopsoas ends at the inguinal ligament and becomes femoral artery at mid inguinal point	Bold to pass
	(c) What is the blood supply of the uterus? <i>Prompt: What is the origin of the uterine artery?</i>	Uterine artery from the anterior division of the internal iliac artery . Crosses above the ureter on its course to the uterus. Commonly anastomoses with the vaginal and ovarian arteries.	Bold

Female Pelvis 2013-1

<p>Question 4 Model Male Pelvis (Urinary System/Testes)</p>	<p>Identify the structures that form the male genitourinary system in this model</p> <p>What are the contents of the spermatic cord?</p> <p>Indicate on the model the location of the named parts of the male urethra</p>	<p>Bladder, ureter, prostate gland, seminal gland, spermatic cord, testis, epididymis, penis</p> <p>Ductus deferens, artery of ductus deferens, testicular artery, testicular vein → pampiniform plexus, lymphatics, autonomic nerves (sympathetic, parasympathetic)</p> <p>Intramural (base of bladder wall), prostatic (length of prostatic) , membranous (short narrow section surrounded by ext sphincter) and spongy (length of corpus spongiosum)</p>	<p>6 to pass</p> <p>Bold to pass</p> <p>3 of 4 to pass</p>
--	---	--	--

Female Pelvis 2010-1

OPENING QUESTION	Identify the structures in this photo (prompt if needed)	COMMENTS
POINTS REQUIRED	1 Rectum No. 27	Need 5/8 to pass
	2 Uterus No. 6/12	
	3 Bladder No. 5	
	4 Sacrum Not numbered	
	5 Pubic symphysis No. 25	
	6 Anal canal No. 1	
	7 Cervix and vagina No. 7 and 24	
PROMPTS		
SECOND QUESTION (if needed)	Please show the potential spaces where free fluid can accumulate in the pelvis	
POINTS REQUIRED	1 rectouterine pouch (of Douglas) No. 26	Need 1 to pass
	2 vesicouterine pouch No. 34	
	3	
	4	
PROMPTS		
PROMPTS		

COMMENTS

Female Pelvis 2007-2

<p>Question 4:</p> <p>Photo: Female Pelvis</p>	<p>a. This is a midline sagittal section of a pelvis. Name the major anatomical structures.</p> <p>PROMPT: this is a female pelvis</p> <p>b. Describe the boundaries and relations of the Pouch of Douglas</p>	<p>Major: Pubic symphysis, Bladder, Vagina, Uterus, Rectum, Sacrum, Blue marker through cervix., External anal sphincter.</p> <p>Minor: Ovary, Tube, suspensory ligament (difficult), L5/S1 disc, Sigmoid, Ureter (difficult)</p> <p>“Recto-uterine pouch”. Inferior most extension of the peritoneal cavity, between anterior rectum and posterior uterus. Close to cervix and posterior fornix of vagina. Open above to peritoneum</p>	<p>5 of bold to pass</p> <p>Rectum, uterus, open above.</p>
--	--	--	---

Liver 2017-1-C

Stem: This is a picture of the liver from below and behind. Moving on to Anatomy.			
Question 4 Liver Subject: Anatomy LOA 1	a) Identify the main structures b) Describe the anatomy of the biliary tree. <i>Prompt: Draw the biliary tree</i>	Lobes – Right (24), left (14), caudate (2), quadrate (21) Vascular – IVC (13), Hepatic art (11), Portal vein (20) Biliary – common hepatic duct (5), gallbladder (9) Ligaments – coronary (12), L triangular (15), R triangular (25), ligamentum teres (17), Diaphragm (6) L & R hepatic ducts run into common hepatic duct Joined by cystic duct from gallbladder to become common bile duct which runs into duodenum	Identify right and left lobes of liver, portal vein and gall bladder 4 out of 6 to pass

Male Pelvis 2017-2-A

Stem: A 73 year old man presents in acute urinary retention. We will start with Anatomy			
TOPIC	QUESTIONS	KNOWLEDGE (essential in bold)	NOTES
Question 1 Genitourinary tract (Model Male Pelvis) Subject: Anatomy LOA: 2	a) Identify the structures on this model. b) Describe the parts of the male urethra c) What is the innervation of the urethra? (bonus question)	a) Bladder , coccyx, corpus cavernosum, deep dorsal vein of penis, ductus deferens, prostate , prostatic urethra, pubic symphysis, rectosigmoid junction, rectovesical pouch, testis , epididymis, tunica albuginea, tunica vaginalis, penile urethra b) - intramural part (pre-prostatic) – surrounded by internal urethral sphincter (within bladder neck) prostatic part (widest part, receives prostatic and ejaculatory ducts) - intermediate (membranous) part – surrounded by external urethral sphincter (narrowest and least distensible part except for external urethral orifice) - spongy (penile) part with intrabulbar fossa proximally and navicular fossa distally c) prostatic nerve plexus (arising from inferior hypogastric plexus) to first 3 parts above - dorsal n. of the penis (from pudendal n.) to spongy part	Bold plus 3 others to pass Bold No pass criteria as bonus question

Male Pelvis 2014-2-B

Stem: We will now move on to Anatomy.			
Question 2 Male pelvis model (Model No: MS2) Subject: Anat LOA: 2	1. Name the parts of the male pelvis visible on this model.	1 Pubic bone , 2 Sacrum , 3 Coccyx, 4 Urinary bladder (a. apex, b. fundus, e. ureteral orifice, f. trigone), 5 Prostate , 7 Seminal vesicles, 8 Spermatic duct, 9 Ureter , 10 Urethral corpus cavernosum, 11 Penis , 12 Glans penis, 13 External urethral orifice, 14 Ischio-cavernosus muscle, 15 Testicle , 16 Epididymis , 17 Pampiniform plexus, 18 Testicular artery, 19 Cremaster muscle, 20 Rectum , 21 Common iliac artery , 22 Common iliac vein , 23 Peritoneum, 24/25 Inguinal ligament , 26 Femoral canal	Bold to pass
	Prompts: What are the... <ul style="list-style-type: none"> • Skeletal features • Organs of the urogenital system • Vascular structures 		
	2. Name the parts of the urethra	- pre-prostatic part (surrounded by internal urethral sphincter) - prostatic part - membranous (intermediate) part (surrounded by external urethral sphincter) - penile (spongy) part	Bold to pass
	3. What is the innervation of the urethra?	- prostatic nerve plexus to first 3 parts above - dorsal n. of the penis (from pudendal n.) to penile part	1 of 2 bold to pass
	Bonus Describe the anatomy of the prostate	<ul style="list-style-type: none"> • Surrounds prostatic part of the urethra (about the size of a walnut). • base sits near the neck of the urinary bladder • Apex is next to the urogenital diaphragm. • Covered in a thick fibrous capsule, which houses the prostatic plexuses of nerves and veins. • 5 lobes: anterior, middle, posterior, & 2 lateral • Arterial supply via inferior vesical, internal pudendal, and middle rectal arteries. • Venous drainage via the prostatic venous plexuses, which is located around the base and sides of the prostate. 	

Male Urethra 2009-1

<p>Question 5:</p> <p>Discussion: Anatomy of male urethra</p>	<p>Describe the parts of the male urethra. and the course of each</p> <p>Where is it narrowest?</p> <p>In a case of rupture of the spongy urethra, where does urine extravasate?</p>	<p>Internal urethral orifice (bladder) > Intramural > prostatic urethra > external urethral sphincter (= membranous (intermediate) urethra), thru perineal membrane to spongy urethra in bulb of penis > spongy(penile) in corpus spongiosum > external orifice.</p> <p>Narrow: Membranous part and external orifice</p> <p>Around the penis/Scrotum/Anterior abdo wall/NOT into the thigh</p>	<p>Must name 3 parts</p> <p>1 of 2</p> <p>Extra info</p>
---	--	---	--

Pelvic bone 2016-1-C

Stem: Moving onto Anatomy. On further questioning, she has been having increasing hip pain			
Question 4 Pelvis - bone Subject: Anat LOA: 1	1. Identify the bony landmarks of the pelvis	3 bones – ilium, ischium, pubis Surface – iliac crest, ASIS, AIIS, ischial tuberosity, ischial spine, PSIS, PIIS, symphysis pubis Joints – SI joints, acetabulum/femur, symphysis pubis Other – pubic rami (4) , ala of ilium, greater/lesser sciatic notches, obturator foramen	Bold
	2. Identify on the model the ligaments of the hip joint and their attachments.	Iliofemoral (AIIS/acetabular rim – intertrochanteric line), pubofemoral (obturator crest – capsule & iliofemoral lig.), ischiofemoral (acetabular rim – base greater trochanter)	Bold
	3. Where might you find a pathological fracture on the model?	Pubic rami, neck of femur, proximal shaft	one

Pelvis Photo 2008-2

Question 4: Photo pelvis	Please demonstrate the major anatomical structures in the photo	Aorta Common iliac vessels Internal and external iliac veins and arteries Ureters Bladder Psoas muscle	At least 8 items to pass
	Please describe the innervation of the bladder	Presynaptic sympathetic fibers (T11-L2/3) via hypogastric plexus (Excite internal urethral sphincter) Presynaptic parasympathetic fibers (Motor to detrusor and inhibitory to internal urethral sphincter) (S2-4) via Splanchnic nerve and inferior hypogastric nerve These synapse with post synaptic neurone on or near bladder wall Inferior to pelvic line (reflex and pain) -Visceral afferent follow P/S fibers retrograde to S2-4 spinal ganglia Superior to pelvic line (pain)- Follow sympathetic fibers retrograde to T11-L2/3 Somatic to external urethral sphincter, urethra via pudendal nerve (S2-4)	To pass: Describe the effects of sympathetic and parasympathetic stimulation on the bladder
	Please identify any nerves that innervate the bladder.	Inferior/superior hypogastric plexus, left and right hypogastric nerve Splanchnic nerve	Bonus question

Pelvis Photos 2009-2

TOPIC	QUESTION	ESSENTIAL KNOWLEDGE	NOTES
Question 1: (Photo)	What structures can you identify in this photograph?	IVC Aorta Ureters Bladder Common iliacs Internal/ext iliacs Inguinal ligament Femoral vessels Testicular vessels Psoas If not already identified, point to ureter and ask, 'what is this structure?'	Need 6 unprompted to pass
Question 2: Can demonstrate on photo	Describe the course of the ureters, and identify the 'narrow' points.	<ul style="list-style-type: none"> • 25 – 30 cm long • run from renal hila inferiorly • marked on x ray as running medial to tips of transverse processes • pass over pelvic brim at bifurcation of common iliacs • on lat wall of pelvis, inclining medially to insert post wall of bladder at VUJ • Narrow points are at..PUJ • ...pelvic brim •VUJ 	4/7 and 2 narrow points to pass
Question 3: (Not related to photo)	What is the arterial blood supply of the ureter?	Arterial Renal arteries in upper portion Gonadal vessels, sometimes in upper Mid portion from branches off abd aorta Inferiorly by branches of common iliacs Venous Renal and gonadal vessels.	Renal and gonadal to pass

Question 5	a) Describe the portal-systemic anastomoses	1	Oesophageal veins draining into azygos (systemic) or left	Oesophageal + 1 other to pass
------------	---	---	---	-------------------------------

[illegible]

Posterior Abdominal Wall 2008-1

OPENING QUESTION	This is a photo of the posterior abdominal wall. Please identify the major structures.	COMMENTS
POINTS REQUIRED	1 Psoas, iliacus	2/2
	2 Aorta, common, ext and int iliac arteries	3/4
	3 IVC and common and ext iliac veins	2/3
	4 Bladder, Ureters	3/3
	5 Gonadal vessels	+
	6 Genitofemoral nerve	+
	7	
PROMPTS		
SECOND QUESTION (if needed)	Describe the course of the ureter from the kidney to the bladder	
POINTS REQUIRED	1 Retroperitoneal, 25-30cm long	
	2 Arise from renal pelvis, ~L1 on left and L2 on right	
	3 Continue distally parallel to tp's of lumbar spine, adherent to parietal peritoneum	
	4 Pass over pelvic brim at bifurcation of common iliac art	
	5 run on lateral wall of pelvis then at level of ischial spine curve anteromedially to enter base of bladder	
		3/5 to pass
PROMPTS		
THIRD QUESTION (if needed)	What are the common sites of ureteric narrowing?	2/3
POINTS REQUIRED	1 Pelvoureteric junction	
	2 crossing pelvic brim	
	3 vessicoureteric junction	
	4	
PROMPTS		

Posterior Abdominal Wall 2005-1

TOPIC: Post abdo wall _____ **NUMBER:** 1-5 _____

OPENING QUESTION	Identify the major structures on this photograph.	COMMENTS
POINTS REQUIRED	1	10 to pass
	2	
	3	
	4	
	5	
	6	
	7	
PROMPTS		
SECOND QUESTION (if needed)	What are the relations of the right ureter on this picture	3 to pass
POINTS REQUIRED	1	
	2	
	3	
	4	
	5	
	6	
PROMPTS		
THIRD QUESTION (if needed)		
POINTS REQUIRED	1	
	2	
	3	
	4	
	5	

Posterior Abdominal Wall 2005-1

TOPIC: Photo: Post abdominal wall _____ **NUMBER: 3.4** _____

OPENING QUESTION	Please identify this structure	COMMENTS
POINTS REQUIRED	Ureter	* Essential
PROMPTS		
SECOND QUESTION	Please describe the course of the ureter from the kidney to bladder.	
POINTS REQUIRED	1 Leaves hilum of kidney at level of L1-2 (slightly lower on right),	*
	2 passing down on psoas major which it leaves at the bifurcation of the common iliac artery,	
	3 crosses the SI joint at the pelvic brim	*
	4 Adheres to posterior parietal peritoneum in front of the internal iliac artery	
	5 It moves forward once reaching the ischial spine to enter the base of the bladder.	*
THIRD QUESTION	Please identify the major vascular structures immediately related to it.	
POINTS REQUIRED	testicular vessels, common iliac vein, external iliac artery, internal iliac artery, IVC, aorta	* 4 to pass
PROMPTS		
FOURTH QUESTION	Identify the places where the ureter is usually narrowed.	
	PUJ, pelvic brim, VUJ	*2/3 to pass

Question 5	(a) Describe the transpyloric plane.	Transpyloric line (halfway between manubrium and
------------	--------------------------------------	--

Ureters 2003-1

TOPIC: URINARY TRACT _____ **NUMBER: 4** _____

OPENING QUESTION	WHAT STRUCTURES OF THE URINARY TRACT CAN YOU IDENTIFY ON THIS PHOTOGRAPH	COMMENTS
POINTS REQUIRED	URETERS X 2	2/2
	BLADDER	
PROMPTS		
SECOND QUESTION (if needed)	DESCRIBE THE RELATIONS OF THE RIGHT URETER	4 TO PASS
POINTS REQUIRED	PSOAS	
	GONADAL VESSELS	
	GENITOFEMORAL NERVE	
	EXTERNAL/INTERNAL ILIAC ARTERY & VEIN	
PROMPTS		

Vasculature 2009-1

[illegible]

Vasculature 2008-1

OPENING QUESTION	Describe the branches of the abdominal aorta that supply the gut	COMMENTS
POINTS REQUIRED	1. Coeliac trunk T12	All 3 to pass
	2. SMA L1	
	3. IMA L3	
PROMPTS		
SECOND QUESTION (if needed)	Describe the arterial supply of the stomach.	2 of 3 branches to pass
POINTS REQUIRED	1. lesser curvature - left gastric (from coeliac trunk)	
	2. lesser curvature - right gastric (from hepatic)	
	3. posterior gastric from splenic	
	4. short gastric arteries from distal splenic	
	5. left gastro-omental (gastro-epiploic) from splenic	
	6. greater curvature - right gastro-omental (gastro-epiploic) from gastroduodenal (from hepatic)	
PROMPTS		
THIRD QUESTION (if needed)	Describe the arterial supply of the colon.	
POINTS REQUIRED	1. Superior mesenteric from aorta	
	a. Ileocolic, right colic, middle colic	
	b. Marginal artery	
	2. Inferior mesenteric artery	
	a. Left colic, sigmoid arteries,	
	b. Marginal artery	
	3. Anastomosis b/w Sup and Inf colic arts	

COMMENTS

Vasculature 2007-1

OPENING QUESTION	Identify the vascular structures adjacent to the left kidney	COMMENTS
POINTS REQUIRED	1 1= abdominal aorta	
6 of 10 to pass	2 2=coeliac trunk	
	3 3=common hepatic artery	
	4 26=splenic artery	
	5 11= left renal artery	
	6 28=superior mesenteric artery	
	7 12= left renal vein 8 7= IVC 9 6=left gonadal vein 10 14=left adrenal vein	
PROMPTS		
SECOND QUESTION (if needed)	Identify structure 25 (<i>ureter</i>). Where are the narrow points of the ureter?	
POINTS REQUIRED	1 PUJ	
	2 Pelvic brim	
	3 VUJ	
PROMPTS		
THIRD QUESTION (if needed)		
POINTS REQUIRED	1	
	6	
PROMPTS		

Vasculature 2007-1

OPENING QUESTION	What are the unpaired visceral branches of the abdominal aorta ?	COMMENTS
POINTS REQUIRED	1 coeliac trunk	3 for a pass
	2 superior mesenteric artery	
	3 inferior mesenteric artery	
	4	
	5	
	6	
	7	
PROMPTS		
SECOND QUESTION (if needed)	What are the branches of the coeliac trunk?	
POINTS REQUIRED	1 common hepatic artery	2/3 to pass
	2 splenic artery	
	3 left gastric artery	
	4	
	5	
	6	
PROMPTS		
THIRD QUESTION (if needed)	Demonstrate the major venous structures in this photo	
POINTS REQUIRED	1 IVC	4/5 to pass
	2 right and left renal veins (23 and 12)	
	3 left adrenal vein (14)	
	4 left gonadal vein (6)	
PROMPTS		