

GROSS ANATOMY EXAMINATION II

SEPTEMBER 21, 1990

PART I. Answer in the space provided. (38 pts.)

1. Discuss the course and function of the internal pudendal nerve and its branches.  
(8 pts.)

Answer in the space provided.

2. Discuss the anatomy of the lesser omentum and its contents. (8 pts.)

3. Indicate your understanding of the venous drainage of the following: (5 pts.)

a. Colle's fascia

b. corpora cavernosa of the penis

c. left suprarenal gland

Answer in the space provided.

d. fundus of stomach

e. left ovary

4. Indicate your understanding of the following: (12 pts.)

a. Deep inguinal ring

b. Right crus of the diaphragm

c. Helicine Arteries

d. Bare area of the liver

PART II. Answer in the space provided. (32 pts.)

1. Discuss the anatomy (structure, relationships, innervation, vasculature, lymphatic drainage) of the bladder. (10 pts.)

Answer in the space provided.

2. Discuss the boundaries of Scarpa's fascia and its extensions. (6 pts.)

3. How do the following structures enter the abdominal cavity. (5 pts.)

- a. Thoracic duct
- b. Lesser splanchnic nerve
- c. Sympathetic trunk
- d. Vagus nerve
- e. Subcostal nerve

Answer in the space provided.

4. Discuss the lymphatic drainage of the sigmoid colon, rectum, and anal canal. (5 pts.)

5. Indicate your understanding of the following: (6 pts.)

a. Automatic bladder

b. Esophageal varicosities

c. Arcuate line of abdomen

PART III. Circle the correct answer(s). (30 pts.)

1. In regard to the fascia in the pelvis and perineum:
  - a. The parietal pelvic fascia is an extension of the transversalis fascia of the abdomen.
  - b. The perivisceral fascia surrounding the prostate can be termed the periprostatic fascia.
  - c. The perivesical fascia is derived from the visceral peritoneum.
  - d. The visceral pelvic fascia is located between the peritoneum and parietal pelvic fascia.
  - e. The obturator externus fascia has a thickening termed the arcus tendineus.
  
2. In the pelvis and perineum:
  - a. The visceral pelvic fascia is continuous with the fascia in the ischiorectal fossa.
  - b. The puborectalis muscle is a skeletal muscle.
  - c. The motor (efferent) nerves to the sphincter urethra muscle are from the autonomic nervous system.
  - d. The superior fascia of the U.G. diaphragm is derived from the membranous layer of tela subcutanea
  - e. Extravasated urine accumulating in the superficial pouch will fill the anterior recess of the ischiorectal fossa.
  
3. With respect to the small intestine:
  - a. Meckel's diverticulum is an occasional feature of the jejunum.
  - b. Lymphoid follicles (Peyer's patches) are in the ileum.
  - c. Circular fold of mucosa are prominent in the jejunum but sparse or absent in the ileum.
  - d. Arcades of blood vessels are more complex in the ileum than in the jejunum.
  - e. Intestinal arteries supply the jejunum and ileum and are located in the extraperitoneal connective tissue.

Circle the correct answer(s).

4. With regard to the duodenum:
- The first part of the duodenum is in direct continuity with the pylorus and is peritonealized.
  - The second part of the duodenum is crossed dorsally by the transverse colon.
  - The superior mesenteric artery arises above and crosses the anterior aspect of the third part of the duodenum.
  - The duodenojejunal flexure is stabilized by the suspensory ligament (Ligament of Treitz).
  - The vagus nerve serves as the parasympathetic nerve supply to the duodenum.
5. Pertaining to the liver:
- According to the internal morphology of the liver, the quadrate lobe and a part of the caudate lobe belong to the left lobe.
  - The anterior layer of the coronary ligament is derived from transversalis fascia.
  - The hepatic veins drain into the portal vein.
  - The phrenicocolic ligament helps suspend the liver.
  - The common bile duct lies ventral (anterior) to the portal vein in the hepatoduodenal ligament.
6. The round ligament of the uterus:
- is derived from the gubernaculum
  - inserts into the pecten of the pubic bone
  - traverses the inguinal canal
  - contains the uterine artery
  - is located in the free edge of the falciform ligament
7. The suprarenal arteries usually may arise from the:
- aorta
  - renal artery
  - inferior phrenic artery
  - superior mesenteric artery
  - celiac artery



Circle the correct answer(s).

8. The descending colon:
- has teniae coli and appendices epiploicae
  - is a retroperitoneal structure
  - is innervated by the pelvic splanchnic nerves of the parasympathetic nervous system
  - receives blood mostly from the inferior mesenteric artery
  - has a paracolic sulcus (gutter) located to it medially
9. Which of the following structures would be found in the superficial pouch/space?
- prostate gland
  - bulbourethral glands
  - membranous part of the male urethra
  - arcuate ligament
  - superficial transverse perineal muscle
10. The following structures form part of the pelvic inlet:
- promontory of the sacrum
  - ischiopubic rami
  - pectineal line
  - iliac crest
  - superior margin of the pubic symphysis
11. The normal position of the uterus is:
- anteflexed
  - anteverted
  - retroflexed
  - retroverted
  - supported by ligaments that are condensations of parietal peritoneum
12. With regard to the scrotum:
- Indirect hernias may descend into the scrotum and lie within the vas deferens
  - The ilioinguinal nerve is responsible for the cremasteric reflex
  - The tunica vaginalis testis represents the lower closed-off portion of the processus vaginalis of the peritoneum
  - The tunica vaginalis testis completely encircles the testis
  - The pampiniform plexus of veins drain into the testicular veins