

1. Review Lab for Practical and Final Exam

Station 1: Circulatory System

References: Lab Manual, Exercise 29 and Exercise 30.

- Q1A. List the letters in order that identify the following arteries:
- I. Subclavian
 - II. Celiac
 - III. Axillary
 - IV. Inferior mesenteric
- Q1B. List the letters in order that identify the following arteries:
- V. External iliac
 - VI. Femoral
 - VII. Gonadal
 - VIII. Posterior tibial
- Q2A. List the letters in order that identify the following arteries:
- IX. Brachiocephalic
 - X. Superior mesenteric
 - XI. Carotid
 - XII. Brachial
 - XIII. Renal
- Q2B. List the letters in order that identify the following arteries:
- XIV. Common iliac
 - XV. Anterior tibial
 - XVI. Radial
 - XVII. Popliteal
- Q3A. List the letters in order that identify the following veins:
- XVIII. Brachiocephalic
 - XIX. Axillary
 - XX. Basilic
 - XXI. Internal iliac
- Q3B. List the letters in order that identify the following veins:
- XXII. Hepatic portal
 - XXIII. Femoral
 - XXIV. Jugular
- Q4A. List the letters in order that identify the following veins:
- XXV. Subclavian
 - XXVI. Cephalic
 - XXVII. Renal
 - XXVIII. Brachial
- Q4B. List the letters in order that identify the following veins:
- XXIX. Great saphenous
 - XXX. Common iliac
 - XXXI. Popliteal
 - XXXII. Median cubital
- Q5A. List the letters in order that identify the following structures in fetal circulation:

- XXXIII. Ductus arteriosus
 XXXIV. Ductus venosus
 XXXV. Foramen ovale
- Q5B. List the letters in order that identify the following structures in fetal circulation:
- XXXVI. Umbilical artery
 XXXVII. Umbilical vein
 XXXVIII. Placenta
- (Be sure you know what all these structures become after birth.)
- Q6A. What causes heart sounds?
 Q6B. A patient has a blood pressure of 120/80.
 I. What equipment was needed to determine this?
 II. Which number represents cardiac contraction?
 III. What is listening to sounds while taking blood pressure called?
- Q7A. Where is the major control center for blood pressure? Name it. Which part of the autonomic nervous system is responsible for raising blood pressure?

Station 2: Lymphatic System and Immunity

References: Exercise 29 in your Lab Manual.

- Q7B. Identify the following structures on the lymphatic models by listing their letters in order on your lab report sheet:
- I. Lymph vessel
 II. Right lymphatic duct
 III. Cysterna chyli
 IV. Thoracic duct
 V. Lacteal
- Q8A. Identify in order the following lymph nodes on the lymphatic model:
- VI. Axillary nodes
 VII. Inguinal nodes
 VIII. Intestinal nodes
 IX. Cervical nodes
 X. Pelvic nodes
- Q8B. Identify in order the following structures on the lymph node:
- XI. Afferent vessel
 XII. Efferent vessel
 XIII. Germinal centers
 XIV. Hilus
- Q9A. Match the type of immunity with the example given on the lab table, and write your answers in order on your answer sheet.
- I. Naturally acquired, active immunity
 II. Naturally acquired, passive immunity
 III. Artificially acquired, active immunity
 IV. Artificially acquired, passive immunity
- Q9B. From the list below, list all letters which identify NON-SPECIFIC immunity.

- A. Inflammation
- B. Fever
- C. B-cells
- D. Interferon
- E. Mucus membranes
- F. Antibodies
- G. Unbroken skin
- H. Lysozyme
- I. T-cells
- J. Gastric juice
- K. Phagocytosis

Q10A. Classify these as C (cellular immunity, CMI) or H (humoral immunity, AMI)

- L. Plasma cell
- M. Cytotoxic cell
- N. Antibodies
- O. Cells made in thymus
- P. Primary circulating lymphocyte (70%)

Station 3: The Urinary System

References: In your lab manual, read Exercise 35 and 36.

Q10B. Identify in order the following structures on the urinary tract model:

- I. Ureter
- II. Pelvis
- III. Bladder
- IV. Urethra
- V. Kidney hilus

Q11A. Identify in order the following structures on the kidney model:

- VI. Renal capsule
- VII. Renal cortex
- VIII. Renal column
- IX. Renal medulla

Q11B. Identify in order the following structures on the kidney model:

- X. Renal pyramid
- XI. Renal calyx
- XII. Renal pelvis
- XIII. Renal papilla

Q12A. Identify in order the following structures on the nephron model:

- XIV. Proximal convoluted tubule
- XV. Renal capsule (Bowman's)
- XVI. Glomerulus

Q12B. Identify in order the following structures on the nephron model:

- XVII. Distal convoluted tubule
- XVIII. Nephron Loop (of Henle)
- XIX. Renal corpuscle
- XX. Afferent arteriole

- Q13A. I. Which direction does secretion move on the model?
II. Which direction does filtration move on the model?
- Q13B. III. Which direction does reabsorption move on the model?
IV. Which letter identifies a juxtamedullary nephron?
- Q14A. What is normal urine specific gravity? What does specific gravity measure?
Q14B. Is protein a normal component of urine? Why or why not?
- Q15A. What is normal urine pH? Name some things that can affect urine pH.
Q15B. What color is normal urine? What might give urine a smoky-red color?

Station 4: The Reproductive System

References: Read Chapter 38 in your lab manual and Chapt. 22 and 23 in your text book.

Q16A. Identify in order the following structures on the male reproductive model:

- I. Vas deferens
- II. Testes
- III. Seminal vesicle
- IV. Prostate gland

Q16B. Identify in order the following structures on the spermatozoa:

- V. Head
- VI. Acrosome
- VII. Body (midpiece)
- VIII. Flagella (tail)

Q17A. Identify in order the following structures on the female reproductive system model:

- IX. Ovary
- X. Uterus (be able to name three areas, and three layers)
- XI. Oviduct (Fallopian tube, uterine tube)
- XII. Vagina
- XIII. Clitoris

Q17B. Identify in order the following structures on the ovary model:

- IX. Growing follicle
- X. Graafian (mature) follicle
- XI. Corpus luteum
- XII. Corpus albicans

Q18A. Choose your answers to these questions from the list on the lab table, and answer them in order on your lab report sheet:

- a. Which ovarian hormone is high in the follicular phase of development?
- b. Which hormone causes ovulation?

- c. Which ovarian hormone is high in the luteal phase of development?
- d. Which hormone causes a primordial follicle to begin developing into a mature follicle?

Q18B. Observe the meiosis diagrams on the lab table and answer in order the following questions:

- a. Is this cell haploid or diploid?
- b. How many functional cells will develop from this cell?
- c. What is this cell called?
- d. Is this cell haploid or diploid?

Q19A. Observe the models of cleavage and answer the following questions in order:

- a. Which letter identifies a zygote?
- b. Which letter identifies the stage called a morula?
- c. Which letter identifies the process of fertilization?
- d. Name the stage that implants in the uterus.

Q19B. Observe the model and answer the following questions in order:

- a. Which letter shows fertilization?
- b. Which letter shows implantation?
- c. Which letter labels the cervix of the uterus?
- d. Which letter labels the fundus of the uterus?

Q20A. Observe the embryonic models and give the letters identifying the following structures in order:

- I. Trophoblast
- II. Inner Cell Mass
- III. Amnion
- IV. Allantois
- V. Yolk Sac

Q20B. Observe the fetal models and give the letters identifying the following structures in order:

- VI. Placenta
- VII. Amnion
- VIII. Umbilical cord