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 <u>in order</u> the following structures on the urinary tract model:

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

Q11A. Identify <u>in order</u> the following structures on the kidney model:

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

Q11B. Identify <u>in order</u> the following structures on the kidney model:

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

Q12A. Identify <u>in order</u> the following structures on the nephron model:

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

Q12B. Identify <u>in order</u> 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 <u>in order</u> the following structures on the male reproductive model:

I. Vas deferens
II. Testes
III. Seminal vessicle
IV. Prostate gland

Q16B. Identify <u>in order</u> the following structures on the spermatozoa:

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

Q17A. Identify <u>in order</u> 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. Clitorus

Q17B. Identify <u>in order</u> 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 <u>in order</u> 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