Regional Anatomy 1 Exam

SECTION A: MULTIPLE CHOICE QUESTIONS (20 MARKS)
Instructions: Answer all questions

1. Modified columnar cells that are unicellular glands secreting mucus are known as:
A. Cilia
B. Microvilli
C. Goblet cells
D. Basal cells

2. The process by which worn-out organelles are digested is known as:
A. Hemolysis
B. Exocytosis
C. Autolysis
D. Endocytosis

3. The difference between meiosis and mitosis is:
A. In meiosis the number of chromosomes in the resulting cells is reduced by half
B. Fewer sperm cells are produced as compared with the number of egg cells
C. Abnormalities seldom occur in mitosis but are fairly common in meiosis
D. Eggs cells are produced be meiosis, sperm cells by mitosis.

4. Which of the following is not a cell inclusion?
A. Lipid
B. Glycogen
C. Melanin
D. Lysosome

5. In the anatomical position:
A. The body is in supine position
B. The body is in a prone position.
C. The palmar surface of the hand is anterior
D. The dorsal surface of the hand is anterior

6. The microscopic study of cells is called:
A. Histology
B. Embrology
C. Cytology
D. Gross anatomy

7. Implantation of a developing individual (blastocyst stage) usually occurs at which stage after fertilization?
A. 3 weeks
B. 1 week
C. 1 day

D. 7hours

8. Arrange the following from the superficial to the deepest.
a. Amnion
b. Amniotic cavity
c. Chorion
d. Decidua
A. d,c,a,b
B. d,a,b,c
C. c,a,b,d
D. a,c,b,d

9. The placenta is formed by the union of the decidua basalis of the endometrium with the:
A. Yolk sac
B. Amnion
C. Chorion
D. Umbilicus

10. Since the seminal vesicles contain single, non branched ducts and flask like secretory portions, they are classified as:
A. Compound tubular
B. Simple branched acinar
C. Simple tubular
D. Simple acinar

11. When the cell is between division, it is said to be in:
A. Interphase
B. Telophase
C. Mitosis
D. Meiosis

12. Which type of cell junction assumes a role in action potential conduction between muscle fibers?
A. Desmosomes
B. Tight junction
C. Hemidesmosome
D. Gap junction

13. Which tissue is characterized by the presence of cell bodies, dendrites and axons?
A. Muscle
B. Vascular
C. Nervous
D. Epithelial

14. Which of the following is NOT an embryonic membrane?
A. Amnion
B. Membranous labyrinth
C. Chorion
D. Allantois

15. The epidermins of the skin, epithelial lining of the entrances to the body, hair and nails are derivatives of:
A. Ectoderm
B. Mesoderm
C. Endoderm
D. Peloderm

16. The early rapid division of a zygote that results in the production of smaller cells called blastomeres is referred to as:
A. Cleavage
B. Parietalis
C. Miosis
D. Meiosis

17. Indicate whether the following statement is TRUE or FALSE:
The zona pellucida is a gelationous covering around the acrosome of a sperm cell.
A. True
B. False

18. The bag of waters that ruptures just before birth is the:
A. Placenta
B. Allantois
C. Chorion
D. Amnion

19. Amniocentesis is a procedure that is used to test for presence of:
A. Fetal viability
B. Fetal distress
C. Chromosomal abnormalities
D. Non division of the morula

20. Trisomy 21 refers to:
A. Extra chromosome in the twenty first pair
B. A deletion of a chromosome in the 21st pair
C. Absent alpha fetoproteins
D. Tay- Sacs disease

SECTION B: SHORT ANSWER QUEDTION (40 MARKS)
Instructions: Answer all questions.
1. Describe the general features of connective tissue 8 mks
2. Describe the phases of cell division and the activities in each 8 mks
3. Draw and a label a diagram to illustrate the structure of a cell 8 mks
4. Describe the human genomes 8 mks
5. Explain the process of chromosomal inheritance 8 mks

LONG ANSWER QUESTIONS
1. Describe the tissues in the human body. 20 mks
2. A woman who just had just missed her menstrual period was concerned that a glass of wine she had consumed the week before may have harmed her embryo 20 mks.

a. What major organ systems undergo early development during the third week and what congenital abnormalities might result from teratogens?
b. She asks you what developments will occur in the first trimester. Describe the embryonic development from fourth to weight week.