

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 epidermis of the skin, epithelial lining of the entrances to the body, hair and nails are derivatives of:
- Ectoderm
 - Mesoderm
 - Endoderm
 - Peloderm
16. The early rapid division of a zygote that results in the production of smaller cells called blastomeres is referred to as:
- Cleavage
 - Parietalis
 - Miosis
 - Meiosis
17. Indicate whether the following statement is TRUE or FALSE:
The zona pellucida is a gelatinous covering around the acrosome of a sperm cell.
- True
 - False
18. The bag of waters that ruptures just before birth is the:
- Placenta
 - Allantois
 - Chorion
 - Amnion
19. Amniocentesis is a procedure that is used to test for presence of:
- Fetal viability
 - Fetal distress
 - Chromosomal abnormalities
 - Non division of the morula
20. Trisomy 21 refers to:
- Extra chromosome in the twenty first pair
 - A deletion of a chromosome in the 21st pair
 - Absent alpha fetoproteins
 - Tay- Sacs disease

SECTION B: SHORT ANSWER QUESTION (40 MARKS)

Instructions: Answer all questions.

- Describe the general features of connective tissue 8 mks
- Describe the phases of cell division and the activities in each 8 mks
- Draw and label a diagram to illustrate the structure of a cell 8 mks
- Describe the human genomes 8 mks
- Explain the process of chromosomal inheritance 8 mks

LONG ANSWER QUESTIONS

- Describe the tissues in the human body. 20 mks
- 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 eighth week.