

9. Which one of the following is the six carbon monosaccharide  
A. Glucose      B. Ribose      C. Ribulose      D. Sedoheptulose
10. Exoskeleton of insects and crustaceans are made up of  
A. Cellulose      B. Protein      C. Lipids      D. Chitins
11. Saturated fatty acids contain  
A. Covalent bond      B. Double bond      C. Single bond      D. Hydrogen bond
12. At room temperature, the unsaturated fatty acid is  
A. Gas      B. Solid      C. Liquid      D. All of the above
13. Amino acids in protein are joined by the following type of bond  
A. Peptide bond      B. Hydrogen bond      C. Covalent bond      D. None of the above
14. Which of the following cells do not have a membrane-bound nucleus?  
A. Eukaryotic cells      B. Prokaryotic cells      C. Plant cells      D. Animal Cells
15. Cell wall of plant cell is made up of .....  
A. Chitin      B. Cellulose      C. Peptidoglycan      D. All of the above
16. A large central vacuole is found in the  
A. Fungal cells      B. Plant cells      C. Animal Cells      D. All of the above
17. Inside lungs exchange of gases takes place in  
A. Alveoli      B. Trachea      C. Larynx      D. Epiglottis
18. Which cell organelle is called the protein factories of the cell?  
A. Mitochondria      B. Ribosomes      C. Nucleus      D. Cell membrane
19. During ..... the rib cage goes down, diaphragm rises and air comes rushing out  
A. Expiration      B. Inspiration      C. Systole      D. Diastole

A

العام الدراسي: ١٤٣٩ / ١٤٣٨

الفصل الدراسي الأول

Final Exam

تاریخ الاختبار: ٢٠ / ٠٤ / ١٤٣٩

الرقم الأكاديمي:

٤٧ رقم الشعبة:

BIO 101 رقم المقرر ورمزه:

اسم المقرر: General Biology I

A. Choose the correct answer (Q. 1-47).

[47 Marks]

1. The digestive and respiratory passages come together in the following part

- A. Larynx      B. Pharynx      C. Trachea      D. Bronchus

2. Stomach lies at

- A. Right side      B. Left side      C. Inner side      D. Middle side

3. The first 25 cm of the small intestine is called

- A. Villi      B. Microvilli      C. Pancreas      D. Duodenum

4. Which one of the following is the largest gland of the body

- A. Gall bladder      B. Pancreas      C. Liver      D. Submandibular gland

5. The secretion of insulin and glucagon hormones takes place by the following gland

- A. Gall bladder      B. Pancreas      C. Liver      D. All of the above

6. Digestion of proteins begins in the

- A. Stomach      B. Small intestine      C. Mouth      D. Large intestine

7. Which is the respiratory disorder?

- A. Chronic bronchitis      B. Emphysema      C. Asthma      D. All of the above

8. Light dependent reactions of photosynthesis occurs in

- A. Stroma      B. Grana      C. Cytoplasm      D. Both A and B

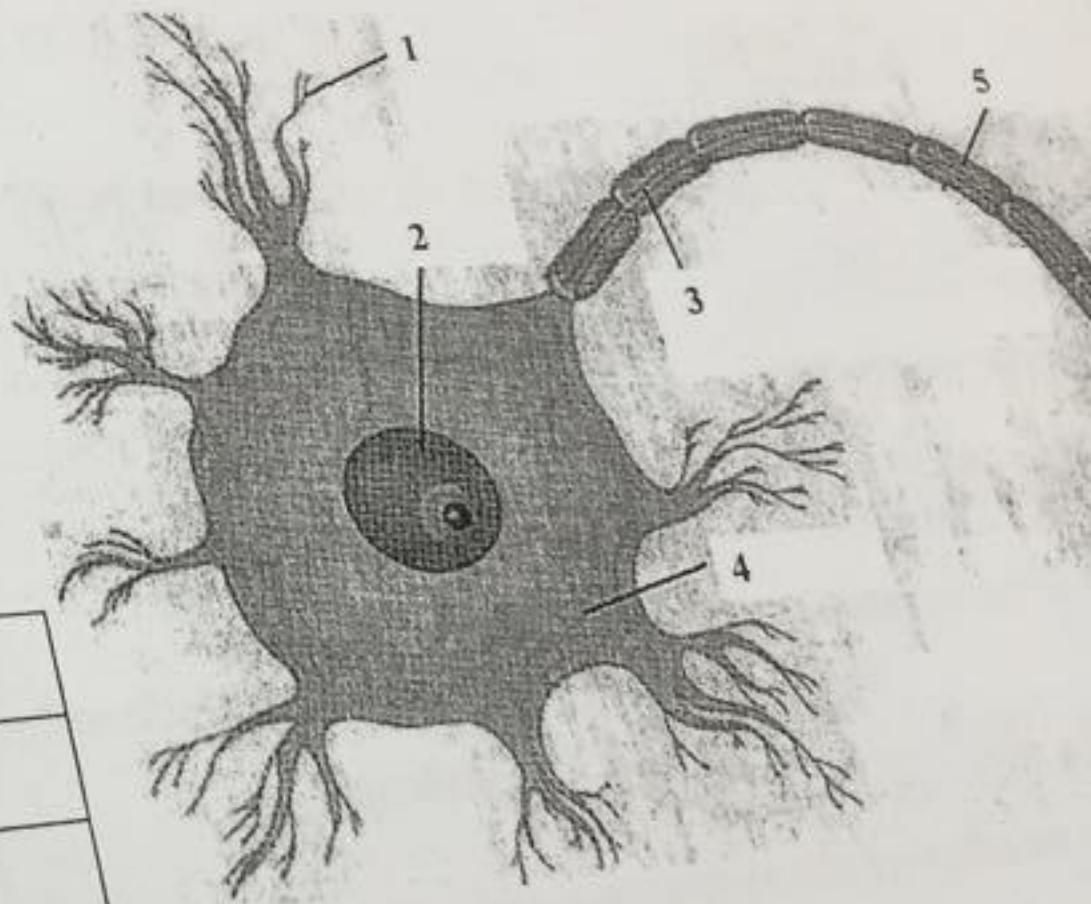
20. ATP (energy) is produced in the following cell organelle  
A. Golgi apparatus    B. Endoplasmic Reticulum    C. Mitochondria    D. Lysosomes
21. During which stage of interphase, DNA Synthesis occur  
A. G<sub>2</sub> stage    B. S stage    C. G<sub>1</sub> stage    D. All of the above
22. Mitosis is the division of  
A. Somatic Cell    B. Reproductive Cell    C. Vacuole    D. Both A & B
23. Fusion of gametes result in the formation of a cell called  
A. Zygote    B. Embryo    C. Adult    D. Egg
24. Alternate forms of a gene is called  
A. Chromosomes    B. Allele    C. Bivalents    D. Tetrad
25. How many times the nucleus divides during meiosis?  
A. Two times    B. Four times    C. Eight times    D. Ten times
26. The blood vessel that carries blood away from the heart is  
A. Veins    B. Capillaries    C. Arteries    D. All of the above
27. During meiosis how many cells are formed  
A. One    B. Two    C. Three    D. Four
28. Contraction of the heart chambers is called  
A. Diastole    B. Systole    C. Cystolith    D. None of the above
29. Red blood cells have a pigment called  
A. Hemocyanin    B. Plastocyanin    C. Hemoglobin    D. All of the above
30. Platelets are produced by the fragmentation of  
A. Monocytes    B. Lymphocytes    C. RBC    D. Megakaryocytes

42. The semifluid inside the mitochondria is
- A. Matrix
  - B. Stroma
  - C. Cell Sap
  - D. Lymph
43. Rough Endoplasmic Reticulum is studded with
- A. Vesicles
  - B. Ribosomes
  - C. Microtubules
  - D. Granules
44. Starch is a
- A. Monosaccharide
  - B. Disaccharide
  - C. Trisaccharide
  - D. Polysaccharide
45. Unit of nervous system is -----
- A. Nephron
  - B. Neuron
  - C. Axon
  - D. Dendrite
46. Septum separates the heart into a right side and a left side?
- A. True
  - B. False
47. All vertebrate animals have a closed circulatory system?
- A. True
  - B. False

**B. Label the given figure**

3 Marks

Dendrites	
Axon	
Axon terminal	
Nucleus	2
Cell body	
Myelin Sheath	



31. Atrioventricular valve present on the right side of the heart is called  
A. Bicuspid valve      B. Tricuspid valve      C. Pulmonary valve      D. All of the above
32. Photosynthesis is a process that requires  
A. Water      B.  $\text{CO}_2$       C. Sunlight      D. All of the above
33. A stack of thylakoids is a  
A. Nucleus      B. Cristae      C. Cell body      D. Granum
34. Set of stages that takes place between two successive cell divisions is  
A. Cell Cycle      B. Mutation      C. Apoptosis      D. None of the above
35. Division of cytoplasm is known as  
A. Mitosis      B. Meiosis      C. Cytokinesis      D. Karyokinesis
36. Function of mitosis is, it permits  
A. Growth      B. Repair      C. Both A & B      D. None of the above
37. The saliva is secreted by  
A. Pancreas      B. Liver      C. Salivary gland      D. Intestine
38. Spermatogenesis produce  
A. Child      B. Egg      C. Sperm      D. Fetus
39. Amino Acid is the monomer of  
A. Proteins      B. Lipids      C. Glucose      D. Fats
40. The diploid ( $2n$ ) number of chromosomes are present in:  
A. Zygote      B. Egg      C. Sperm      D. Ovum
41. The chloroplast is the site of  
A. Photolysis      B. Photosynthesis      C. Hydrolysis      D. None of the above