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(.....)
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II: (B) Complete the following sentences (5 marks)

1. Homeostasis is controlled by.....and.....
2. Epithelial tissues receive nutrients by.....and it is characterized by its ability to replace damaged tissue through.....
3. Alveoli of lungs are lined by.....epithelial cells.
4. The deficiency of insulin in blood causes a disease known as.....while T4 deficiency causes.....
5. A ligament connects.....while a tendon connects.....

III: Answer the following (12 marks)

1. write notes on massive transport

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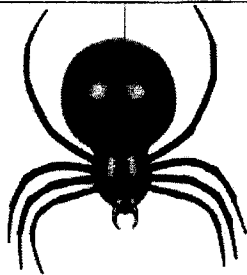
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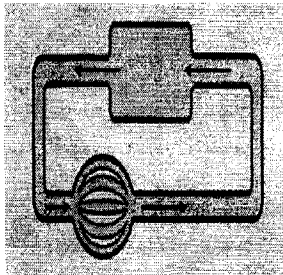
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V: Answer the following

(12 marks)

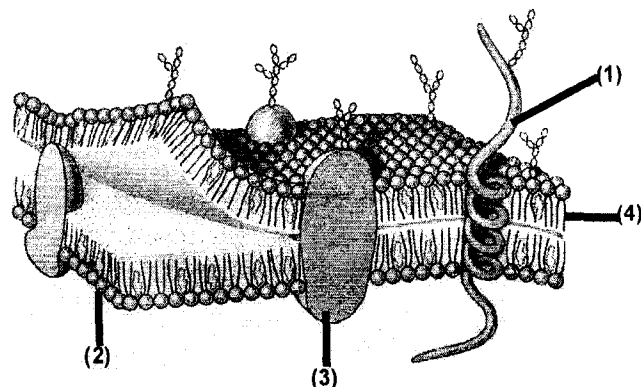


(1)

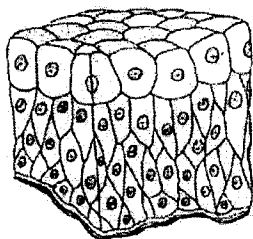


(2)

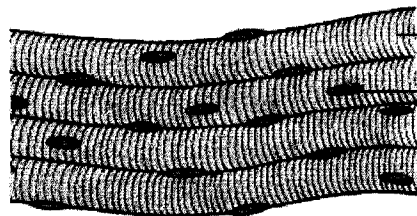
(A)
 (1) Type of symmetry:.....
 Identify sample Phylum:.....
 (2) Type of circulatory system.....
 This type of circulatory system is present in
 Phylum.....



(B)
 Label 1.....
 Label 2.....
 Label 3.....
 Label 4.....



(C)
 (1) Identify the C.T.....
 Description.....
 Location.....



(D) Identify the muscular tissue
 List 3 characteristics
 a-.....
 b-.....
 c-.....

(E) Draw a labeled diagram of a bipolar neuron

(F) Draw a labeled diagram of a mitochondrion



Assiut University
Faculty of Science
Zoology Department



First Semester General Zoology
Exam /January/2017



Time: 2 hour
Level: First
Course Code: 100Z

Answer the following questions (50 marks)

I: Choose the best single correct answer (10 marks)

1. A phylum which is characterized by having contractile vacuole.....
a) Annelida b) Porifera c) Ciliophora d) Apicomplexa
2. A solid mass of 16-64 cells formed by cleavage is.....
a) Blastula b) Gastrula c) Morula d) Blastocoel
3.has a bilayer structure and present in the cell.
a) Golgi complex b) Cell membrane
c) Centriole d) None of them
4. Nerves penetrate epithelial tissue.....
a) True b) False
5. The first invertebrates to develop jointed legs are.....
a) Sponges b) Annelids c) Flat worms d) Arthropods
6.is a three layered embryo.
a) Cleavage b) Gastrula c) Blastula d) Morula
7. The coelom is present in
a) Human b) Insects c) *Fasciola* d) Both a and b
8. Which of the following cell organelles is surrounded by two membranes?
a) Mitochondrion b) Cell membrane c) Nucleolus d) All are true
9. binary fission is a type of.....
a) Sexual reproduction in *Amoeba* b) Sexual reproduction in *Trypanosoma*
c) Asexual reproduction in Protozoa d) None of them
10. The Head of a phospholipid molecule is.....
a) Hydrophobic b) Hydrophilic c) Neutrophilic d) Hydrostatic
- 11.....is present only in the animal cell and play a role in cell division.
a) Lysosome b) Ribosome c) Centriole d) Cell membrane

12. Which organelles modify, sort and package proteins in the cell?
 a) Mitochondria b) Ribosomes c) Golgi complex d) Lysosomes
13. How many divisions are required to go from a zygote to 64 cell embryo stage?
 a) 2 b) 4 c) 5 d) 6
14. Which of the following organelles has its own DNA?
 a) Centrioles b) Lysosomes c) Mitochondria d) All are false
15. What type of epithelial cells is taller than they are wide?
 a) Squamous b) Columnar c) Stratified d) Cuboidal
16. Which one of the following is highly vascularized?
 a) Cartilage b) Simple epithelium c) Stratified epithelium d) Areolar C.T.
17. Spinal cord originates from
- a) Endoderm b) Mesoderm c) Ectoderm d) Mesoendoderm
18. Which of the following is the correct scientific name for a house cat?
 a) *felis domesticus* b) *Felis Domesticus*
 c) *felis Domesticus* d) *Felis domesticus*
19. The right sequence of animal development is
- a) Fertilization>Gametogenesis>Cleavage>Blastula and gastrula formation
 b) Gametogenesis>Fertilization>Cleavage>Blastula and gastrula formation
 c) Gametogenesis> Cleavage> Fertilization>Blastula and gastrula formation
 d) Fertilization>Cleavage> Blastula and gastrula formation>Gametogenesis
20. Multinucleation is a characteristic of
- a) Apicomplexa b) Porifera c) Ciliophora d) Mastigophora

II: (A) Write the correct word or the scientific expression of the following (5 marks)

1. Excretory cells of Platyhelminthes
 (.....)
2. A process in animal development in which organs are formed from embryonic layers.
 (.....)
3. A kingdom of life in which organisms are unicellular
 (.....)
4. A group of the same kind of tissues that perform a job in the animal's body.
 (.....)

2. Compare between the thyroid and parathyroid glands

| | The thyroid gland | The parathyroid gland |
|--------------------------------------|--------------------------|------------------------------|
| a) Hormones | | |
| b) Function (mention one) | | |

3. Structure and function of the endoplasmic reticulum

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4. List 5 characters of Chordata

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5. Connective tissue fibers

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- 4- Fertilization of male and females gametes of *Plasmodium* sp. occurs in human blood ()
- 5- Intermediate host is the host harbouring larve stages of helminthes ()
- 6- Infective stage of *Fasciola gigantica* is cercariae ()

D- III- Answer the following question:

(illustrating your answer with labeled drawings whenever possible)

1-Write short notes on Two only of the following: (10 marks)

- a- The mode of infection with *Toxoplasma gondii*.
- b- Main sources of parasitic infection.
- c- Prevention & control of *Schistosoma* sp. (Bilhariza).

2- Differenatiate between two only of the following: (10 marks)

- a - *Taenia solium* and *Diphyllobothrium latum* scolices.
- b- *Fasciola* and *Schistosoma* cercaria.
- c- *Entamoeba histolytica* and *Giardia lamblia* trophozotes

3- Write briefly on two only of the following: (10 marks)

- a- Sexual cycle of *Plasmodium* sp. in stomach of mosquito.
- b- Laboratory diagnostic stages of the following parasites:
Ascaris lumbricoides-Schistosoma haematobium-Hymenolepis nana
- c- Infective stage and mode of infection of the following parasites:
Trichocephalus trichiurus-Enterobius vermicularis-Fasciolopsis buski

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Good luck

Prof. dr., Gamal H. Abed

Assiut University
Faculty of science
Zoology Department



Final examination
Course number 321 Z
(Parasitology)
Time: 2 hours

June 2017

Answer the following question (Write the answer only in your paper)

A- Fill in the blanks: (8 marks)

- 1- The intermediate host of *Schistosoma haematobium* is
whereas in *S. mansoni* is
- 2- Adult worms of *Wuchereria bancrofti* occur inthey
transmitted by.....and their adult female laying larvae
termed.....
- 3- *Entamoeba gingivalis* lives inbut *Entamoeba coli* lives
in.....they feed on.....

B- Choose the one correct answer: (6 marks)

- 1- *Pirenella conica* snail is intermediate host of (*Schistosoma haematobium*,
S. mansoni- *Fasciola hepatica* -*Fasciola gigantica* - none of them)
- 2- *Heterophyes heterophyes* is the trematode parasites, to complete its life
cycle requires (four hosts- five hosts- six hosts - none of them)
- 3- The insect vector of *Trypanosoma gambiense* is (mosquito- *Triatoma* -
house fly - sand fly- none of them)
- 4- The second intermediate host of *Diphyllobothrium latum* (*Cyclops*- cattle-
Sheeps - frogs -none of them)
- 5- Man acts as a final host in (*Plasmodium* sp. -*Toxoplasma gondii* -
Echinococcus granulosus - Cysticercosis - none of them)
- 6- Mosquito insect acts as final host in (*Trypanosoma gambiense*-
T. cruzi - *Leishmania tropica* - *Giardia lamblia* - none of them)

C- Put a suitable(√) or (X) adjacent to the following: (6 marks)

- 1- Zoonoses, are the diseases transmissible between man
and other animals ()
- 2- Final host, is the host harbouring sexual forms of Protozoa ()
- 3- Infective stage of *Trichomonas vaginalis* is trophozoite ()

IV: Answer the following

(6 marks)

1. Complete the missing parts in following table

| | | |
|-----------------|--------|--------|
| Cytoskeleton | 1..... | 2..... |
| Thicknes | | |
| Function | | |
| Type of protein | | |

2. Complete the following table

| | Platyhelminthes | Nematoda |
|------------------|-----------------|----------|
| Digestive system | | |
| Body cavity | | |
| Body shape | | |
| Excretory system | | |

3. Complete the following table about hormones

| Hormones | Function of the hormone | The secreting gland |
|------------|-------------------------|---------------------|
| Melatonin | | |
| Adrenaline | | |
| Glucagon | | |
| TSH | | |

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