# **General Zoology 2 (105 Z)**



Benha University Faculty of Science Department of Zoology Semester: Second

Date: 11/6/2019

**Dr**. Doaa Sabry Ibrahim

Level: First level

**Sepc**: Zoology

Exam time: 1 hr

## A. Complete each of the following:

**(16 marks)** 

1. Respiration includes <u>ventilation</u>, <u>gas exchange</u>, and <u>oxygen utilization</u>.

- 2. A neuron is divided into the soma or cell body, dendrites, and axon.
- 3. The large intestine is made up of <u>cecum</u> and <u>colon</u>.

### **B.** Mention the functions of the following: (6 marks)

#### 1. The pancreas:

- Secretes digestive enzymes into the duodenum, the first segment of the small intestine. These enzymes break down protein, fats, and carbohydrates.
- The pancreas also makes insulin, secreting it directly into the bloodstream. Insulin is the chief hormone for metabolizing sugar.

#### 2. The circulatory system role against blood loss and against pathogens:

The circulatory system protects against blood loss from injury and against pathogens, including foreign microbes and toxins introduced into the body.

- <u>Clotting</u>. The clotting mechanism protects against blood loss when vessels are damaged.
- <u>Immune</u>. The immune function of the blood is performed by the leukocytes (white blood cells) that protect against many disease-causing agents (pathogens).

#### 3. Glandular and interstitial cells in *Hydra*:

- Glandular cells: These cells pour their digestive enzymes into the entron for the extracellular digestion.
- <u>Interstitial cells</u>: They are transformed to any other type of cells.

## C. Correct the underline words in the following sentences: (10 marks)

- 1. Excretion in platyheminthes is performed by <u>interstitial cells</u>. (<u>flame cells</u>)
- 2. Coelenterata possess characteristic stinging cysts, known as the <u>glandular cell</u>. (nematocysts)

3. Tr	Trypanosomes are <u>free living</u> flagellates. <u>(parasitic)</u>					
	In <i>Euglena</i> , the <u>paramylon granules</u> aid in carbohydrate synthesis. (The <u>chloroplasts</u> )					
5. <u>Co</u>	Coelentrata consists of a blind gut. (Platyhelminthes)					
	The lymphatic ducts drain the lymph into the left and right <u>pulmonary</u> veins. (subclavian)					
7. De	Deglutition is chewing the food and mixing it with saliva. (Mastication)					
8. <i>H</i> y	8. <i>Hydra</i> is a marine coelenterate. ( <u>freshwater</u> )					
9. The outer layer of the kidney is called <u>medulla</u> . (cortex)						
10. Ins	piration results	primarily from c	ontraction of the a	abdominal muscles. (diaphr	ragm)	
D. Cho	ose the corre	ct answer: (1	6 marks)			
<b>1. Hya</b> a) 2	<i>lra</i> moves by	ways. b) 3	c) <u>4</u>			
	don't stigophora,	have locomotor b) Sarce	-	c) <u>Sporozoa</u>		
3 a) Sc	_	g <b>rowth portion i</b> b) <u>Neck</u>	n <i>Taenia</i> . c) Strobila	a		
	_		<b>ium takes place b</b> ngitudinal binary b	by fission c) Conjugation		
	h	ave nervous system b) Pro		c) Parazoa		
	a	re vase shaped o	eells with a collar	c) Amebocytes		
7. Th	e infective stag	e of schistosoma	is			
a) <u>ce</u>	rcaria	b) metac	ercaria	c) miracidium		
8. Lymnaea snail is the intermediate host of						
a) <u>F</u>	asciola_	b) <i>schisi</i>	osoma	c) Taenia		