Kafrelsheikh University Faculty of Science Zoology Department second level/ First Term 2017/2018





Time: 2h Subject: models of invertebrates Total Marks: 100 (70 Written, 10 Oral, 20

Exercises).
Date:11/1/2018

3- The evolution of an internal body cavity offered an advantage in animal body design in all areas except

A. circulation.

- B. digestion.
- C. freedom of movement.
- D. gamete storage.
- 4- Platyhelminthes represents an example of-
 - A. Cellular grade of organisation
 - B. Tissue grade of organisation
 - C. Organ-system grade of organization
 - D. Tissue-organ grade of organization
- 5- Tube-within-a-Tube body plan is shown by-
 - A. Coelenterate
 - **B. Platyhelminthes**
 - C. Aschelminthes (Nemethelminthes)
 - D. Porifers

Question No. 3 .write short notes on the following.(6 .point each)

- 1- What are germ layers?
- 2- Affinities of Rotifers?
- 3-What is coelom.
- 4- What is cephalization? How does lateral symmetry favor cephalization.
- 5-Explain three reasons why segmentation is such an important evolutionary step.

Question No. 4 Answer the following question and. Illustrate your answers with diagrams (21. degree)

- 2- <u>Draw</u> well labeled diagrams <u>(reproductive</u> system of earthworm-). How is excretion in earthworm?
- <u>3-Draw</u> well labeled diagrams (digestive system of Prawn). how digestion and excretion occurs?

Kafrelsheikh University **Faculty of Science** Zoology Department Second level (Zool. + Bot.) First term 2018





Time:

Chordate (Z 204) Subject: Total Marks: 100 (70 Written, 10 Oral, 20 Practical)

15/1/2018 Date:

(عدد صفحات الإمتحان) Exam in one page

I- Answer the following questions. Illustrate your answer with labeled drawings

(40 marks)

- 1- Compare of the urinogenital system between a dog fish and petromyzon.
- 2- Describe the brain structure of Tilapia nilotica.
- 3- Explain the circulatory system of petromyzon.
- 4- Write briefly on:

Feeding mechanism of Amphioxus - general characters of Chondrichthyes

5- Sketch & label of:

Larva of ascidia. Balanoglossus

II- Complete each statement:-

(20 marks)

- 1- Give the formal name of the group commonly known as tunicates......
- 2- The blood in amphioxus is.....
- 3- Cartilaginous fishes do not have.....
- 4- The fish heart has.....
- 5- A collection chamber that reduces the resistance of blood flow into the heart of a fish is called.....
- 6- Jawless vertebrate are members of
- 7- A fish is characterized by the presence of.....,.....
- 8-is a dark red flattened structure which is closely connected to the pyloric limb of the stomach.
- 9- Gills of tilapia on each side are covered with a.....
- 10- The urinary bladder and kidneys make up of a fish.

III- Define these vocabulary terms in your own words: (10 marks)

Craniate - Notochord- Typhlosole- Lamphidrin - endostyle

End of exam

الممتحن: أ. د. سماء بكر

Page 1





Kafr EL Shekh University

Faculty of Science Zoology Department First term Exam 2017 - 2018 Anatomy and Physology 2nd level of Zoology Time allowed: 2hours

Total Degree: 100 marks "70 Written 10 Oral 20 Practical"

I) Supply the missing words: 20marks

- 1. Atresia is
- 2. Plasma cells in lungs secrete and the mast cells contain and
- 3. and are powerful stimulants of gastric secretion.
- 4. Unconditioned salivation induced by which stimulates
- 5. Mastication includes
- 6. Protein of Hb is qunitively more important than plasma protein becauseand......

II) MCQ: 10 marks

- 1. After the expulsion of the ovum from the follicle the remaining granulose cells change to (epithelial lutein interstitial) cells.
- 2. Mucous cells contain translucent granules the precursor of (mucin amylase lipase).
- The usual motile and fertile sperms are capable of (flagellated ciliated straight) movement.
- 4. Many changes in the skin if males are due to deposition of (profein fats vitamins) in the skin.
- Exposure of the blood to high PCo₂ at the tissue facilitates (unloading of OXyHb
 – loading of OxyHb unloading of OxyHb and Shifts the O₂Hb dissociation
 curve to the right)

III) write in short: 20 marks

- 1. The phagocytosis, Digestive and storage functions of the liver.
- Air conditioning.
 Co-Operativety.
- 4. Hormonal factors the stimulate spermatogenesis.

IV) Explain: 20 MARKS

- 1. Bronchi
- 2. The humoral effect on the secretion of pancreatic juce.
- 3. The luteal phase of the ovarian cycle.
- 4. By illustration only the transport of Co2 in the blood.





Kafr EL Shekh University
Faculty of Science
Zoology Department

First term Exam 2017 - 2018 Anatomy and Physology 2nd level of Zoology Time allowed: 2hours

Total Degree: 100 marks "70 Written 10 Oral 20 Practical"

I) Supply the missing words: 20marks

- 1. Atresia is
- 2. Plasma cells in lungs secrete and the mast cells contain and
- 3. and are powerful stimulants of gastric secretion.
- 4. Unconditioned salivation induced by which stimulates
- 5. Mastication includes

II) MCO: 10 marks

- 1. After the expulsion of the ovum from the follicle the remaining granulose cells change to (epithelial lutein interstitial) cells.
- 2. Mucous cells contain translucent granules the precursor of (mucin amylase lipase).
- 3. The usual motile and fertile sperms are capable of (flagellated ciliated straight)
- 4. Many changes in the skin if males are due to deposition of (profein fats vitamins) in the skin.
- 5. Exposure of the blood to high PCo₂ at the tissue facilitates (unloading of OXyHb loading of OxyHb unloading of OxyHb and Shifts the O₂Hb dissociation curve to the right)

III) write in short: 20 marks

- 1. The phagocytosis, Digestive and storage functions of the liver.
- 2. Air conditioning. 3. Co-Operativety.
- 4. Hormonal factors the stimulate spermatogenesis.

IV) Explain: 20 MARKS

- 1. Bronchi
- 2. The humoral effect on the secretion of pancreatic juce.
- 3. The luteal phase of the ovarian cycle.
- 4. By illustration only the transport of Co₂ in the blood.

Kafrelsheikh University Faculty of Science Zoology Department second level First Term 2017/2018





Time: 2h Subject: models of invertebrates Total Marks: 100 (70 Written, 10 Opal, 20 Exercises). Date: 11/1/2018

Answer the following question (70 degree)

Answer the following question (70 degree)
Q: 1 .Complete the following spaces. (14.degree)
Q: 1.Complete the test
1-Nematomorpha, or the horsehair worms, areliving as
adult and in arthropods .
adult and cuticle and Digestive
adult and in arthropods . Body wall in Nematomorpha with cuticle and Digestive
cystem is
2-Nemertea similar to phylum, Triploblastica and
2-Nemertea similar to phylum, 111plooning
symmetry . Digestive tract in Nemertea isand have a long
Digestive tract in Nemertea isand have
which lays within the Excretory organs in Nemertea areand Reproduction
Excretory organs in Nemerica are
through and
fillough
3-Phylum Rotifera areanimals, mainly found in, rarely
3-Phylum Rottleta are
3-Phylum Rotifera areanimals, mainly found inhelps in inAnterior end with aorgan calledhelps in
andand reproduction of
Locomotion in Rotifera byand representation
rotifers can beand by
rotiters can be
4-The Parapodium serve asconsists ofdorsaland
4-The Parapodium serve as long stiff internalknown as
a ventralboth supported by 2 1018
dorsal and ventral
ANGUER (1 Point
Q: 2 .MULTIPLE CHOICE QUESTIONS: CHOOSE THE BEST ANSWER (1. Point
<u>each)</u>
1- The clitellum of an earthworm
B. is associated with reproduction.
A. contains the heart. B. is associated with a property of the second se
C. is necessary for movement.
C. is necessary for movement
Impum 25
2- Segmented worms are known as
p planarians.
A-nematodes.
D. arthropods
C. annelids
GI WILLIAM