

Mansoura University
Faculty of Science
Botany Department
Mansoura - Egypt



جامعة المنصورة
كلية العلوم
قسم النبات
المنصورة - مصر

Final Examination in Botany

Educational Year: 3rd Level
Course(s): Stress Physiology and Biotic Control
Time: 2 hrs.
Full Mark: 60

Subject: Botany (B325)
Program: Environmental Sciences
Date: 27/5/2013
Question Mark: 20

Answer the following questions:

- Q1:** Effect of structural features of stomatal apparatus as biotic factor on stomatal movement under watering and water stress.
- Q2:** Discuss the effect of chemical stress induced by deficiency of nitrogen, sulfur, silicon, iron and copper on plant growth and metabolism.
- Q3:** Briefly write on the following:
- a- Physical nature of transpiration.
 - b- Active absorption of water by plant root.

Examiners:

Prof. Omar A. El Shahaby

Prof. Afaf Gaber

Mansoura University
Faculty of Science
Botany Department
El-Mansoura, Egypt



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Final Examination in Botany

First Term: Jan. 2013

Educational Year: Third Level

Program (Branch): Biology

Subject: Bot (ES 326)

Course(s): Producing ecosystem and pollen grain

Time: 2 hrs Date: 3/6/2013

Full mark: 60

Question mark: 20

Answer the following questions:

Q1: Write shortly on each of the following

1. Water and nitrogen cycles in ecosystem. (7 marks)
2. How can ecosystems be sustainably managed? (6 marks)
3. Global warming (7 marks)

Q2: Discuss the following sentences:

1. Services provided by ecosystem (5 marks)
2. How does energy flow in ecosystem? (5 marks)
3. Structure of anther (5 marks)
4. Apertures of pollen grains (5 marks)

Q3: Write short notes on each of the following:

- 1) Forms of pollen grains (6 marks)
- 2) History of palynology (8 marks)
- 3) Polarity and symmetry of pollen grains (6 marks)

Best wishes

Examiners:

Dr. Yasser El-Amier

Dr. Ahmed Abd El-Gawad

Mansoura University
Faculty of Science
Zoology Department
Subject: Parasitology ع ب 308
Courses' Parasitology ع ب 308



Second Term
3rd Level: Chem./Zool.
Date: 6-6-2013 الخميس
Time Allowed: 2hr
Full Mark: (60)

Answer all Questions: Each Question [20] Mark
Illustrate your answer with labeled diagram

1- Write short notes on Two of the following:

- A- Life cycle of *Plasmodium Spp.*
- B- Life cycle of blood digenea.
- C- Life cycle of *Faciola Spp.*

2- Try TWO of the following :

- a- Life cycle of *Trypanosoma gumbiense.*
- b- Life cycle of *Ascaris Spp.*
- c- Life cycle of *Leishmania Spp.*

3- Fill the spaces with the correct answers:

- a- According to their habitats, the parasites are divided into -----(1)----- and -----(2)----- while according to their mode of life, the parasites are divided into -----(3)-----and -----(4)-----
- b- There are four types of hosts: -----(5)-----, -----(6)-----, -----(7)----- and -----(8)-----
- c- Sexual reproduction in protozoa takes place by -----(9)----- and -----(10)-----
- d- The genus *Leishmania* includes three species that infect man: -----(11)----, ---(12)----- and -----(13)-----.
- e- *Trichomonas vaginalis* lives in -----(14)-----, -----(15)----- and -----(16)-----
- f- The infective stage of *Heterophyes heterophyes* is -----(17)-----, while in *Taenia saginata* is----- (18)-----.
- g- The infective stage of *Balantidium coli* is -----(19)-----, while in *Ancylostoma* is --- (20)-----.

Prof. Dr/ Sayed ahmed El-Tantawy

Mansoura University
Faculty of Science
Zoology Department
Subject: Human Physiology
ع ب 307
Courses: Metabolism & Endocrine



Second Term
Third level: Ecology
Date: 10-6-2013
Time Allowed: 2hr
Full Mark: (60)

Answer the following Questions

Question Mark:

Q1: a- Explain the physiological importance of 2 only [7]

- 1- Transamination process
- 2- Hexose monophosphate shunt
- 3- Kreb's cycle
- 4- High liver glycogen content

b- Discuss 2 only of the following expressions [8]

- 1- Ketosis
- 2- Glycogenesis
- 3- B-Oxidation
- 4- fatty liver

Q2: a- Comment on the fate of 2 only [7]

- 1- The amino group splitted from amino acids
- 2- Active acetate (Acetyl CoA)
- 3- Pyruvic acid

b- Write shortly on 2 only [8]

- 1- The general amino acid pool and protein turnover
- 2- The factors affecting blood glucose level
- 3- The meeting point between carbohydrate and fat metabolism
- 4- Evidence for urea formation in the liver and its excretion by the kidney

Q3: a- Mention the physiological role 2 only [7]

- 1- Growth hormone
- 2- Thyroid hormones
- 3- Organic and inorganic substances in controlling hormone secretion

b- Compare between each of the following one item only: [8]

- 1- Cushing, syndrome and Addison disease
- 2- Cretinism and Graves disease

Q4:a- Discuss 2 only of the following items:

[10]

- 1- The mechanism of steroid hormones
- 2- Hormones of pancreas
- 3- Neural hormonal control

b- Complete the following sentences:

[5]

- 1- Parathyroid hormone is regulated by-----, tetany state result from -----and treated by-----
- 2- Glucocorticoid hormones secreted from -----of-----gland
- 3- -----is secreted from -----cells of the thyroid gland and it is opposite to that of -----by -----.
- 4- ACTH secreted from-----, meanwhile, FSH secreted from-----
- 5- ADH secreted from-----and-----stimulates the glucagon

تمنياتنا بالتوفيق

اد وفاء الخولى اد هناء على حسن