



Final Examination in Botany
Second Term: Jun. 2014

Educational Year: Third Level

Subject: (326 ب ع)

Time: 2 hrs Date: 21 /5 /2014

Program (Branch): Environmental Sciences

Course(s): Ecosystem & Pollen grains

Full mark: 60

Question mark: 20

Answer the following questions:

Q.1 Write on each of the following:

(20 marks)

- 1- Structure of anther.
- 2- Unit and polarity of pollen grains.
- 3- Aperture of pollen grains.

Q.2 A- Write on each of the following:

(10 marks)

- 1- Shape of aperture.
- 2- Structure of cell wall.

B- Give an account on:

(10 marks)

- 1- Trophic levels in the ecosystem.
- 2- Agriculture ecosystem.
- 3- Energy flow within ecosystem.

Q3. Discuss in detail each of the following:

(20 marks)

- 1- Measuring of primary production.
- 2- The biotic components of the ecosystem.
- 3- The nitrogen cycle.

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Subject: (ع ب 324)

Time: 2 hrs

Date: 11 /6 /2014

Program (Branch): Environmental Sciences

Course(s): Plant Community & Desert Habitats

Full mark: 60

Question mark: 20

Answer the following questions:

Q.1 Write on each of the following:

(20 marks)

- A- The characters of plant community.
B- Quadrat methods of sampling the vegetation.

Q.2

A- Complete the following sentences:

(10 marks)

- 1- The general appearance of vegetation is referred as
- 2- According to Raunkiaer life-form classes, phanerophytes are divided into,, and
- 3- The transects are of two types: and
- 4- The number of occurrence of species is called
- 5- In classification of plant community, the major unit of vegetation is followed by

B- Write on each of the following:

(10 marks)

- 1- Types of Egyptian desert
- 2- Classification of xerophytes.

Q3. A- Write in details on:

- 1- Desertification. (10 marks)
- 2- Geography of Egypt. (5 marks)
- 3- Sand dunes and wadi habitats in the Egyptian desert. (5 marks)