

College of Science.
Department of Botany & Microbiology

First Midterm Exam
Academic Year 1443-1444 Hijri- First Semester

Exam Information معلومات الامتحان		
Course name	BOTANY	
Course Code	BOT 102	
Exam Date	2022-10-13	1444-03-17
Exam Time	07: 00 PM	
Exam Duration	Choose an item.	ساعتان
Classroom No.	5 م 38ب1	
Instructor Name	عبدالظاهر مصطفى	

Student Information معلومات الطالب		
Student's Name		
ID number		
Section No.		
Serial Number		

General Instructions:

- Your Exam consists of PAGES (except this paper)
- Keep your mobile and smart watch out of the classroom.

- عدد صفحات الامتحان صفحة. (باستثناء هذه الورقة)
- يجب إبقاء الهواتف والساعات الذكية خارج قاعة الامتحان.

هذا الجزء خاص بأستاذ المادة

This section is ONLY for instructor

#	Course Learning Outcomes (CLOs)	Related Question (s)	Points	Final Score
1	CLO 1-1 Students will be able to define the basic concept of Botany and Biology.	Q1,Q2	10	20
2	CLO 1-2 Students will be able to recognize plant-environment relationships	Q4	3	
3	CLO 2-1 Students will be able to explain characters that link plants to each other and to their environment	Q3	4	
4	CLO 2-2 Students will be able to interpret plants aspects & phenomena that links to their boiolgy	Q5	3	
5				
6				
7				
8				

Question 1: Choose the correct answer from the following (5marks, each 0.5):

1. Study of external structure of a plant is _____ :

- a. Plant Anatomy
- b. Plant Physiology
- c. Plant Morphology
- d. Plant Ecology

2. _____ produces energy in the form ATP:

- a. Chloroplast
- b. Mitochondria
- c. Vacuole
- d. Nucleus

3. The root tip is covered by a _____ :

- a. Root hair
- b. Root spines
- c. Root cap
- d. Root thorns

4. Exchanging of genetic material between homologous chromosome is called _____ :

- a. Expressing
- b. Heredity
- c. Crossing over
- d. Exon

5. Under the earth surface stems are modified into _____ :

- a. Spines
- b. Rhizome
- c. Bracts
- d. Tendrils

6. Plant ground tissue includes:

- a. Parenchyma tissue
- b. Collenchyma tissue
- c. Sclerenchyma tissue
- d. All of a, b, and c

7. This is _____ stem habit.

- a. Repent
- b. Caulescent
- c. Prostrate
- d. Not a, b, and c

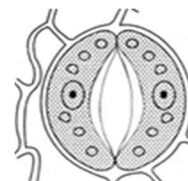


8. The photosynthetic cells in leaves are parenchyma cells that are called:

- a. Collenchyma
- b. Chlorenchyma
- c. Fiber
- d. Sclereids

9. The stoma open when guard cells _____ :

- a. Lose water
- b. Gain water
- c. Lose sugar
- d. Gain sugar



10. This type of leaf is called _____ :

- a. Simple
- b. Palmately compound
- c. Pinnately compound
- d. Doubly compound



Question 2: write (T) next to the correct sentences and (F) for the wrong sentences (**5marks, each 0.5**):

- ___ 1. The **epidermis** is made of parenchyma cells in a single layer.
- ___ 2. **Leaf size** of sun plant is bigger than that of shade plant.
- ___ 3. The **Meristems** are found in zones of the plant where growths take place.
- ___ 4. **Vacuole** function in plant cell is for storage and chemical digestion.
- ___ 5. **Diploid cell** which goes through meiosis ends up with 4 genetically unique diploid cells.
- ___ 6. The leaves **veins** in the **Dicot** plants look Parallel.
- ___ 7. **S (synthesis)** is a stage at the **Mitosis** cell division when the DNA copied.
- ___ 8. **The tissue** is composed of groups of organs functioning together.
- ___ 9. **Intron** is the **non-coding** part of the DNA.
- ___ 10. The F2 phenotypic ratio of **dihybrid** cross is 3:1.

Question 3: Complete the sentences by writing the correct words in the blanks (**4marks, each 0.5**):

1. The study of plants is called _____
2. The conversion of light energy into chemical energy in the chloroplasts is called _____
3. The Nucleus contains DNA and proteins in the form of loose threads called _____
4. Cell that has a nucleus with nuclear membrane and cell organelles is called _____
5. A watery solution that contains the cell organelles, salts, enzymes is called _____
6. Group of cells having similar structure and function is called _____
7. Leaves are attached to stems at _____
8. Epidermis produces a waxy material called _____

Question 4: Read the first column and select a letter of the suitable term in the second column and put this letter in the answer table given below. (3marks, each 0.5)

No	Column I	Letter	Column II
1	The growing terminal bud inhibits the development of the lateral buds	A	Respiratory roots
2	They are not considered cellular nor living organisms	B	Nucleosome
3	<i>Avicennia marina</i> , (black mangrove)	C	Apical Dominance
4	They are made up of proteins known as tubulins.	D	Sclereids
5	A type of <i>sclerenchyma</i> that has various shaped	E	Viruses
6	DNA is wrapped around histones proteins.	F	Microtubules

The answer table:

1st Column	1	2	3	4	5	6
2nd Column						

Question 5: Match the suitable labels to the pictures. (3marks, each 1.5)

Labels

1. Monocot Root
2. Dicot Root
3. Monocot Stem
4. Dicot Stem
5. Monocot Leaf
6. Dicot Leaf

