Time:2 hour



Benha University
Faculty of science
Botany Department

D.r / Ahmed Abd El Razek

)

Signature (

## Taxonomy examination (232 n) (48) mark

<u>Aı</u>	Answer the following questions: (12) ma					
1-	<u>C</u>	ompare between :-				
	a)	Fleshy and false fleshy fruits.				
		·	ilies (liliaceae – papilionioideae - Malv	aceae)		
2-		entify the following :-	` <b>.</b>	(12) mark		
		Fruits . b) Phyllotaxy				
3-		rite the scientific expression of	the following definitions:	(10) mark		
5		The staminate whorl of the flower.	the following definitions.			
	,		earing the floral organs at special nodes.			
		Cohesion of the anthers only, but file				
	d)	The male gametophyte in the flower				
	e)	The mature pollinated and fertilized				
4_		hoose the correct answer:		(14) mark		
•			sidered among the artificial ones			
	1-	a- System of Bentham & Hooker.		• • • • • •		
		c- System of Engler.	d- System of Bessey.			
	ii-	•	· · · · · · · · · · · · · · · · · · ·	lividual		
	ii- When staminate and pistillate flowers are produced on different individual plants, the plant is described as					
		a- polygamo-dioecious plant.				
		c- monoecious plant.	d- dioecious plant.			
	iii-	Any of the following characterizin	•			
		a- Pentacyclic flowers.	b- Tricyclic flowers.			
		c- Hexacyclic flowers.	d- Tetracyclic flowers.			
iv- If calyx and corolla are present in the flower, it is called						
		a- dichlamydeous.	b- monochlamydeous.			
		c- trichlamydeous.	d- achlamydeous.			
	v-	The essential floral organs are	-			
		a- calyx and epicalyx.	b- androecium and gynoecium.			
		c- calyx and corolla.	d- all the above.			

# نموذج إجابة مادة التصنيف الزهرى (232) ن استاذ المادة د / احمد عبد الرازق عبد الله تاريخ الامتحان 2016/01/05م

#### 1- Compare between:-

a) Fleshy and false fleshy.

Fleshy fruits they are also known as succulent fruits. The pericarp is fleshy, differentiated into three distinct layers, epicarp,mesocarp and endocarp.

False fleshy non-ovarian parts such as the receptacle participate in the formation of the fruits. These fruits are called pseudocarps fleshy

b) Androecium and Gynoecium in families (liliaceae – papilionioideae - Malvaceae)

Androecium in family liliaceae Stamen 6. In two whorls, some times attached to the perianth. Gynoecium Carpls 3, syncarpous, ovary superior, trilocular wih numerous ovules on axile placenta.

but in family paplionioideae Androecium Stamens 10 diadelphous. But in Gynoecium carpls one , ovary unilolocular with several ovules on marginal placentation .

### 2- Identify the following:-

a) Fruits.

The fruit is defind as the mature, pollinated and fertilized pistil or gynoecium of the flower..

### b) Phyllotaxy

mean the arrangement of the floral leaves on the floral axis( receptacle)

### 3- Write the scientific expression of the following definitions:

a) The staminate whorl of the flower.

(Gynoecium)

b) The metamorphosed shoot system bearing the floral organs at special nodes.

(flower)

c) Cohesion of the anthers only, but filaments are free .

(synantherous)

d) The male gametophyte in the flowering plants.

(Pollen grain)

e) The mature pollinated and fertilized ovary or gynoecium of the flower.

(fruit)

•	$\overline{}$	noose the correct answer.
	i-	Any of the following systems is considered among the artificial ones
		b- System of Linnaeus.

- ii- When staminate and pistillate flowers are produced on different individual plants, the plant is described as ......d- dioecious plant.
- iii- Any of the following characterizing the monocotyledonous plants? b- Tricyclic flowers.
- v- The essential floral organs are ...

4. Choose the correct answers

b- androecium and gynoecium.