
	TANTA UNIVERSITY FACULTY OF PHARMACY DEPARTMENT OF PHARMACOGNOSY					
	FINAL EXAMINATION FOR FIRST YEAR STUDENTS					
	COURSE TITLE:		Pharmacognosy 1	COURSE CODE: PG202		
DATE:	12/6/2016	TERM: SECOND	TOTAL ASSESSMENT MARKS: 50	TIME ALLOWED: 2 HOURS		

Part I Question I (10 points)

Sometimes the flowers are aggregated on the plant forming what is called inflorescence, according to the method of branching, the inflorescence are classified into three classes. Mention these classes, define each one then enumerate the different types under each.

A-1-

A-2- Its types are:

- | | |
|------------|-----------|
| a-i- | ii- |
| iii- | iv- |
| v- | vi- |
| vii- | |

b-i-

b-ii-

B-1-

B-2- Its types are:

- | | | |
|-----------|----------|----------|
| a- | | |
| b- | | |
| i- | i-1..... | I-2..... |
| ii | | |
| iii | | |

C-

Question II

(15 points)

Alkaloids are chemical compounds synthesized by the plant.

Write on the following questions:

A- Definition:

B- General characters

i-

ii-

iii-

iv-

C- Test for identity

i-

ii-

iii-

D- Give the names of three herbal drugs contain alkaloids, mention their biological origin and uses, in addition to their identity either microscopical or by the use of chemical tests.

Drug Item	I	II	III
Name			
Biological origin			
Uses			
Identity			

Part II

Question 1

20 points

Please match between sentences in group (A) with only one answer in group (B) and write the number of correct answer in the Answer Table. Each answer will be selected for one time only.

Group (A)

- 1- It is the elongated receptacle below calyx and ovary.
- 2- It is used as fumigating agent.
- 3- This bark is used as anthelmintic.
- 4- It contains tannins which gives greenish black color with FeCl_3 .
- 5- A compound with anti-microbial activity, which is found in white cinnamon.
- 6- This compound is absent from *Cinnamomum cassia*.
- 7- Glucofrangulin is hydrolyzed during drying to give frangulin and
- 8- It is C-glycoside of aloe-emodin found in Cascara.
- 9- This plant contains no companion cells in the phloem tissue.
- 10- This substance constitutes 80 % of volatile oil of Sassafras wood.
- 11- This wood is used in perfumery due to santalol content.
- 12- The great bulk of this wood is composed of tracheids.
- 13- This compound is oxidized into guaiac blue.
- 14- It is a bitter principle glucoside of safranal.
- 15- A pathological out growth formed on the twigs of *Quercus infectoria*.
- 16- These are bracts which enclose the disc florets in santonica.
- 17- Pappus of bristles are found as a calyx of this plant florets.
- 18- This blue volatile oil is present in Roman Chamomile.
- 19- These are bitter principles found in Quassia wood and Roman Chamomile.
- 20- It is a scaly bract from its axis a floret arises in plants of family Asteraceae.

Group B

- 21-*Rhamnus frangula* 22-*Rhamnus purghiana* 23-Palea 24-Arnica
25-Calendula marigold 26-uniseriate bracts 27- imbricated bracts
28- *Quassia amara* 29-eugenol 30-hypanthium 31-*Santalum album*
32-guaiaconic acid 33-galls 34-picrocrocin 35-Coniferous wood
36-guaiaretic acid 37-glucose 38-*Punica granatum* 39-canellal
40-Cascarilla 41-Cinchona 42-barbalion 43-quassin & anthemic acid
44-carthamin & carthamidin 45-quassin & anethole 46-cascarosides
47- Chamazulene 48-guaiazulene 49-*Lavendula officinalis* 50-safrole

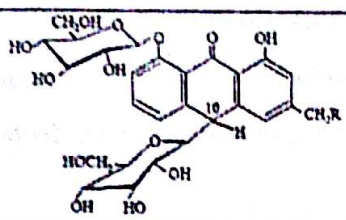
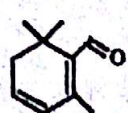

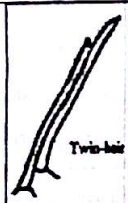
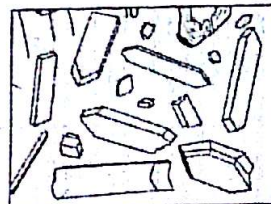
Answer Table

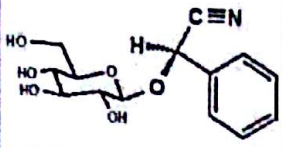


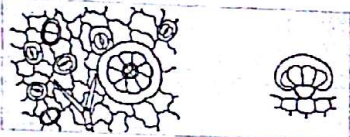
Sentence number (A)	Answer number (B)	Sentence number (A)	Answer number(B)
1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

Question 2

5 points

Complete the following table:

Compound or key element	Name of plant contains this compound or key element	Only one use of the plant
	1-	
	2-	
	3-	
	4-	
	5-	

Compound or key element	Name of plant contains this compound or key element	Only one use of the plant
	6-	
carthamin	7-	
	8-	
	9-	
	10-	

Good Luck