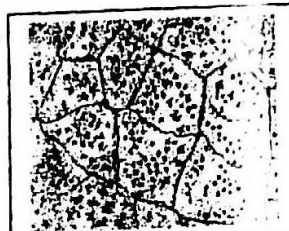
 TANTA UNIVERSITY FACULTY OF PHARMACY DEPARTMENT OF PHARMACOGNOSY			
FINAL EXAM FOR FIRST YEAR CLINICAL STUDENTS			
COURSE TITLE:	BOTANY AND MEDICINAL PLANTS		COURSE CODE: PG101
DATE: 5/1/2016	TERM: FIRST	TOTAL ASSESSMENT MARKS: 50	TIME ALLOWED: 2 HOURS

Part I: Leaves (30 marks 70 minutes)

A-Choose only one answer which you consider correct and record your choice in the corresponding place in the answer sheet provided below. (15marks)

1- Regarding to this picture

- a- Is the key element of plant called deadly night shade
- b- Use in treatment of Parkinsonism
- c- Its toxicity cause yellow vision
- d- Give positive Vitali's test
- e- Both (b) and (d)

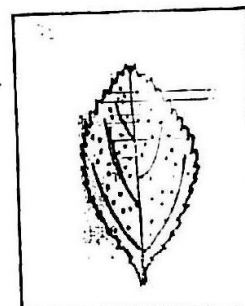


2- Leaf used as hepatoprotective

- a- Rosemary
- b- Boldo
- c- Gauafa
- d- Both (a) and (b)
- e- All of the above

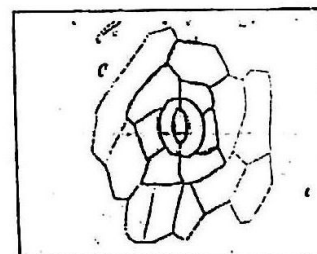
3- Regarding to this picture all of these are true except

- a- Leaf related to F. Rutaceae
- b- Rigid and brittle when dry, Cartilagenous when moist
- c- Contain luteolin and diosmin in the epidermal layer
- d- Used in the treatment of the peripheral vascular disorder
- e- With KOH → red color



4- Regarding to diosphenol

- a- Is vol. oil present in peppermint leaves
- b- Is used in treatment of varicose veins
- c- Has diuretic and antiseptic effect
- d- Present as sphaerocrystal in epidermal layer
- e- Both (c) and (d)

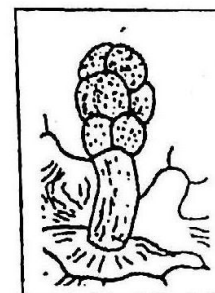


5- This stomata is present in

- a- Buchu
- b- Digitalis
- c- Squill
- d- All of the above
- e- Both (a) and (b)

~~6- Regarding to this picture all of these are true except~~

- a- It is the key element of hyoscymus niger
- b- Contain anisocytic stomata
- c- This hair may be present in stramonium leaf
- d- Present in leaves contain epidermal alkaliod
- e- Present in leaf used as anti spasmodic



7- Drug used to increase gastric and pancreatic secretion

- a- Mentha
- b- Jaborandi
- c- Rosemary
- d- Coca
- e- None of the above

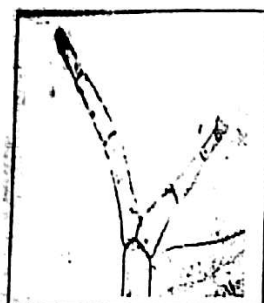
- 8- Leaves contain epidermal alkaloid are
 a- Coca b- Belladonna c- Boldo d- Both (a) and (b) e- All of the above
- 9- Regarding to boldo leaves
 a- Related to F. Monimiaceae 1 b- Give positive Mayer's test
 c- Contain Glycoside d- increase bile secretion
 e- All of the above
- 10- Leaves used as sedative
 a- Belladonna b- Cherry laurel c- Guafa
 d- Coca e- Both (a) and (b)
- 11- All of these leaves are used as diuretics except
 a- Tea due to the presence of Theophylline b- Boldo
 c- Uva ursi d- Buchu e- Squill secondary effect
- 12- Regarding to black tea all of these are true except;
 a- Is called cured tea b- Is used to decrease the body weight
 c- The leaves are heated to inactivate the enzymes.
 d- contain theaflavins which gives the color of the tea
 e- It precipitate protein
- 13- Henna leaves is used as anti-dandruff due to
 a- the presence of Lawson b- Antiseptic effect due to phenolic glycoside
 c- The presence of flavonoids
 d- Both (b) and (c) e- all of the above
- 14- This is the transverse section of leaf
 a- Related to family Myrtaceae
 b- Contain alkaloids
 c- Has smooth muscle relaxant effect
 d- Has diaphoretic effect
 e- Both (b) and (d)
- 15- Mucilage
 a- Give red color with ruthenium red
 b- Present in Buchu
 c- Present in Erythroxylaceae
 d- Is the main constituent of althea leaf
 e- All of the above
- 16- Regarding to this picture all of these are true except
 a- The T.S. of jaborandi leaf
 b- For leaf related F. Erythroxylaceae
 c- Its leaf is used as stimulant and tonic
 d- The cortical tissue is formed of parenchyma and collenchymas
 e- Give positive result with Mayer's reagent



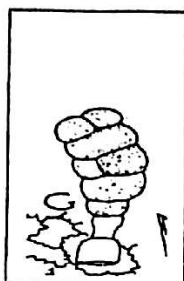
17- Regarding to Iunatosides B:

- a- Is the acetyl product of purpuria glycoside B
- b- On partial hydrolysis gives secondary glycosides digitoxin , gitoxin and digoxin.
- c- Give positive Kedde's test which is specific for aglycone only
- d- Its structure contain OH grope in position 14, 16
- e- Both (a) and (d)

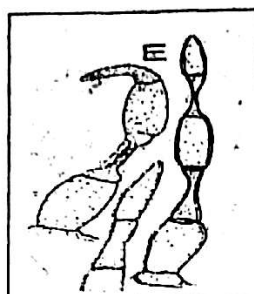
18- Regarding to these pictures



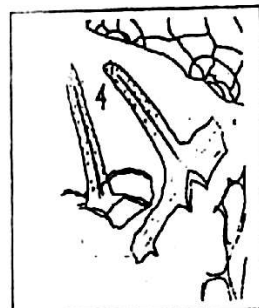
1



2



3



4

- a- Picture 1 and 2 is present in all family solanaceae
- b- Picture 1 present in leaf has isobilateral palisade
- c- Plant has the hair No. 1 contain anisocytic stomata
- d- Both (b) and (c)
- e- All of the above

19- Regarding to the above pictures

- a- The leaf which has the hair No. 3 not used as crude powder
- b- Picture 3 is called digitalis hair
- c- Picture No. 4 is senna hair
- d- All of the above
- e- Both (a) and (b)

20- Residue of drug + conc. HNO_3 and evaporate then add alc. KOH this test is

- a- Kedde's test
- b- Vittal's test
- c- Specific for cardiac glycosides
- d- General test for alkaloids
- e- Both (b) and (d)

Answer Sheet:

No.	A	B	C	D	E	No.	A	B	C	D	E
1						11					
2						12					
3						13					
4						14					
5						15					
6						16					
7						17					
8						18					
9						19					
10						20					

B- Write the letter (T) to the correct answer, and the letter (F) to the false one
Correct the false one by put line under the false words and write the correct
answer in the specific place (7.5 marks)

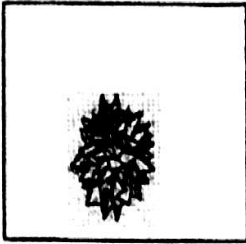
No.	The statements	correct words	Letter
1	In hypogeal germination cotyledon leaf is the first leaf appears on the stem		
2	Spines in the branches of orange tree is considered as Prophyls leaves		
3	A whorl of bracts surrounding a group of flowers is called spathe		
4	In family Graminae glume is called (sterile bract)		
5	anthocyanins is formed in the leaves due to decrease of light and temperature		
6	ligules are outgrowth or extensions of long Sheath		
7	The length of the petioles is constant in the same plant		
8	dicot. and monocot. leaves may be simple, loped, or compound		
9	Multicastate venation with vein oriented in all direction is called convergent		
10	When the surface of the leaf is covered with short stiff hairs is called villose.		

Discuss why..... (7.5 marks)

- 1- Green tea is used to decrease body weight
.....
- 2- Digitalis leaves not taken as crude drugs
.....
- 3- Stramonium is called thorn apple plant
.....
- 4- Buchu leaves is used for the treatment of the peripheral vascular disorder
.....
- 5- Uva Ursi should be taken with vegetable based diet
.....
- 6- Digitoxin not taken with activated charcoal
.....
- 7- Uva Ursi not taken during pregnancy
.....
- 8- The anthraquinones is taken as glycoside (inactive form) not as aglycone
which is the active form
.....
- 9- Coca leaves are used as local anesthetic
.....
- 10- Henna leaves are used as antidandruff
.....
- 11- The solanaceous leaves not takes with jaborandi leaves
.....
- 12- - Winter green is used for the treatment of rheumatic disease
.....
- ~~12- Black tea takes this color after fermentation~~
.....
- 14- Cardiac glycosides of squill give -ve result with keller kiliani's test
and +ve result with Liebermann's test
.....
- 15- Cherry laurel leaf is used as sedative
.....

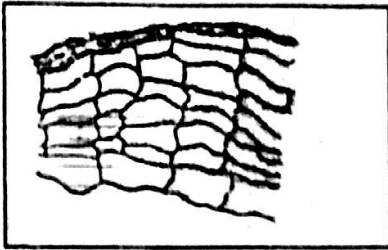
Question no II.

Identify the following elements (a) then answer the question below each one (b & c)



1- a -

b- It is formed from



3- a -

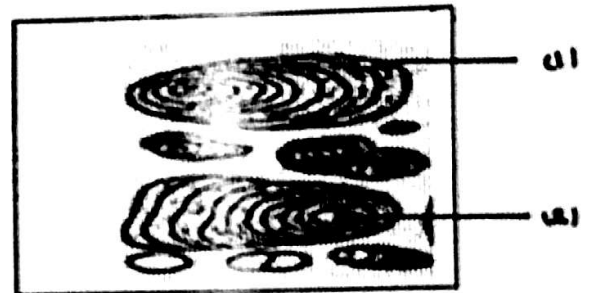
b- Describe it

c- it is formed as a result of



2- a -

b- It is composed of



4- a -

b- write the name of the numbered areas

c- It is chemically formed

From	internally
and	externally

Question no III

Complete the missed parts in the following table .

Drug	Botanical origin	Active constituents	uses
1-	Fam . Graminae		1- As diuretic
2-	It is the Bleached and dried product obtained by		1- Culture media
3- Lycopodium			
4-	It is the dried solid residue obtained by evaporation of	Anthraquinone glycoside	
5-		Contains 1- saponin glycoside	

Good luck

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