
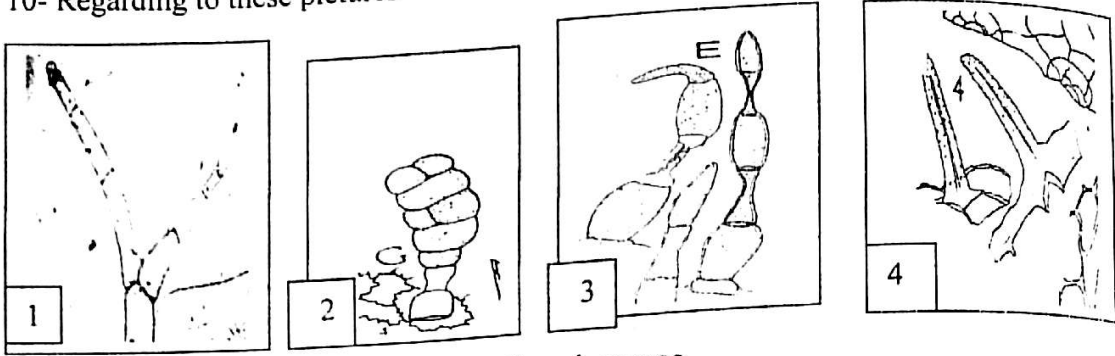
		TANTA UNIVERSITY		
		FACULTY OF PHARMACY		
		DEPARTMENT OF PHARMACOGNOSY		
FINAL EXAM FOR FIRST YEAR STUDENTS				
COURSE TITLE:		PHARMACOGNOSY 1		COURSE CODE: 1135
DATE: 16/1/2017	TERM: FIRST	TOTAL ASSESSMENT MARKS: 150		TIME ALLOWED: 2 HOURS

Question (1)(75 marks)

Choose only one answer which you consider correct and record your choice in the corresponding place in the answer sheet provided below.

No.	a	b	c	d	e	No.	a	b	c	d	e	No.	a	b	c	d	e
1						35						69					
2						36						70					
3						37						71					
4						38						72					
5						39						73					
6						40						74					
7						41						75					
8						42						76					
9						43						77					
10						44						78					
11						45						79					
12						46						80					
13						47						81					
14						48						82					
15						49						83					
16						50						84					
17						51						85					
18						52						86					
19						53						87					
20						54						88					
21						55						89					
22						56						90					
23						57						91					
24						58						92					
25						59						93					
26						60						94					
27						61						95					
28						62						96					
29						63						97					
30						64						98					
31						65						99					
32						66						100					
33						67											
34						68											

10- Regarding to these pictures



- a- Picture 1 and 2 is present in all family solanaceae
- b- Picture 1 present in leaf has no collenchymas cells
- c- Plant has the hair No.4 contain anisocytic stomata
- d- Both (b) and (c)
- e- All of the above

11- Regarding to the above pictures

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

12- these plants are used as diuretics

- a- Boldo
- b- Deal wood
- c- Cinchona barks
- d- Both (a) and (b)
- e- All of the above

13- Regarding to Catharanthus leaves all of these are true except:

- a- Is related to family apocyanaceae
- b- Used as antioxidant
- c- Contain indole alkaloids
- d- Treat lymphatic carcinoma
- e- Treat acute leukemia in children

14- This plants have Hypoglycemic effect

- a- Quinine alkaloid
- b- Guafa leaves
- c- Cinnamon bark
- d- All of the above
- e- Both (a) and (b)

15- Leaf used as diaphoretic

- a- Stramonium
- b- Jaborandy
- c- Boldo
- d- Rosemary
- e- None of the above

16- Regarding to tea :

- a- Green tea contain more catechins than black tea
- b- Cured green tea contain more theaflavin
- c- Theaflavins are responsible for the colour and the taste of black tea.
- d- Contain theobromine which is diuretic
- e- All of the above

- 17- 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

- 18- Plant not contain tannin is /are

a- Quassia
 d- Cinchona

b- Canella

c- Cinnamon

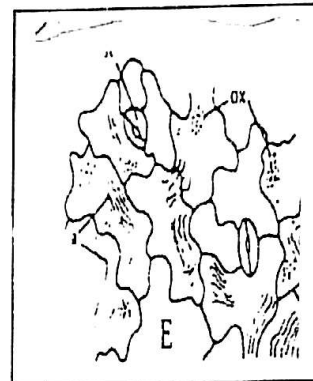
e- Both (a) and (b)

- 19-Plant related to family Simarubaceae is

a- Quassia wood
 d- Cascara Bark

b- Deal wood
 e- Quillaia bark

c- Guaiacum



- 20- This stomata is

a- present in plant used as laxative
 b- Present in plant related to family leguminosae
 c- Present in plant used as diuretic
 d- Characteristic to family solanaceae
 e- Both (a) and (b)

- 21- Anomocytic stomata is present in

a- Leaf used as diuretics b- Digitalis c- Leaf contain raphides of CaOX
 d- Plant related to family liliaceae e- All of the above

- 22- Leaves contain epidermal alkaloid are

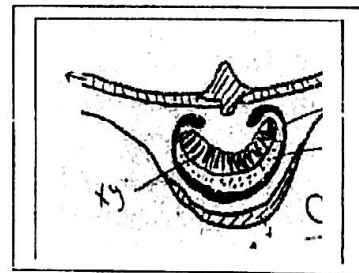
a- Coca b- Belladonna c- Boldo d- Both (a) and (b) e- All of the above

- 23- Regarding to boldo leaf all of these are true except;

a- Related to F. Rutaceae b- Give positive Mayer's test
 c- Contain Glycoside d- Increase bile secretion
 e- Contain vol. oil

- 24- 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



- 25- When the bark break irregularly with sharp projecting points the fracture is called;

a- Splintery b- Fibrous c- Laminated
 d- Granular d- None of the above

- 26- Quillaia bark

a) Is inner bark b) Contain cork as a key element
 c) Belongs to family Rosaceae. d- Its odor is strong sternutatory
 e) All of the above

- 27- According to the arrangement of its vessels, Quassia wood is described as
 a- Interlocked grained b- Diffuse porous c- Ring porous
 d- Both (a) and (b) e- None of the above



- 28- Regarding to this picture
 a- Contain Lenticels which is a type of lower plants
 b- Present in bark contain Free and combined Anthraquinon
 c- More Agreeable laxative preferable to cascara
 d- All of the above e- Both (a) and (b)

- 29- Jamaica wood
 a- Has false annual rings
 c- Used as a flavoring agent
 e- Both (a) & (d)

- b- Is a sap wood
 d- Lack the annual rings

- 30- Regarding to this picture, it is
 a- Tangential longitudinal section
 b- Section for plant used as anthelmintic
 e- Both (a) and (b)

- c- Radial section
 d- None of the above



- 31- Regarding to mosses all are true except;
 a- The leaf show midrib
 b- Could be found on cinchona root bark
 c- Their leaves are arranged spirally
 e- Could be present on Cascara Bark

- d- They are not parasitic.

- 32- Plant used for treatment of chronic gout and rheumatism is;
 a- Guaiacum b- Deal wood
 d- Canella bark e- None of the above

- c- Cascarilla bark

- 33- Regarding to cassia bark all of these are true except;
 a- Has small amounts of tannin b- Has anti-ulcer properties
 b- Antiallergic effect Due to (diterpenes)
 c- Contain mainly cinnamic aldehyde
 e- It contain phenyl propanoid derivative

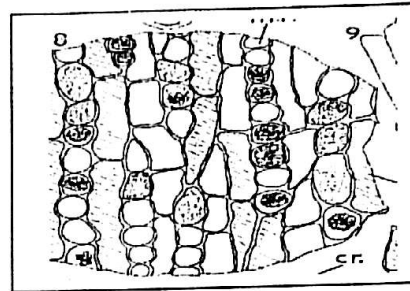
- 34- Upon examining Frangula powder microscopically it shows
 a- Lignified cork cells b- Idioblasts of CaOx crystals
 c- Lignified sclerides d- Epiphytes
 e- None of the above

- 35- The opposite plant
 a- Is used for the manufacture of perfumes
 b- Contains mainly saponins
 c- Is used as parasiticide for head and body lice.
 d- Both (b) & (c)
 e- All of the above



- 36- FeCl_3 gives positive results with
- a- Guaiacum due to the presence of guaiaconic acids
 - b- Cinchona due to the presence of phlobaphenes
 - c- Galls due to the presence of tannin
 - d- Clove due to the presence of tannin
 - e- All of the above

- 37- The opposite figure is
- a- The key element of cascarella
 - b- Cork cells with prism of CaOx
 - c- Secretion cells or latex tube
 - d- Is specific for cinchona bark
 - e- Both (a) and (c)



- 38- Regarding to quinine all of these are true except;
- a- Is used for symptomatic relief of fevers and aches.
 - b- Cause hyper glycemia during treatment
 - c- Is used as polygalactourinate long acting derivatives
 - d- Its over dose may cause ringing in the ears
 - e- Gives +ve Thaleioquin's test

- 39- *Croton eluteria* Fam. Euphorbiaceae this is the botanical origin of
- a- Cinnamon
 - b- cascara
 - c- Cascarilla
 - d- Quassia wood
 - e- None of the above

- 40- These plants contain alkaloids
- a) Cinchona
 - b) cascarilla
 - c) Quassia
 - d) Deal wood
 - e) Both (a) and (b)

- 41- Drug used in the treatment of chronic gout and rheumatism
- a- Cinchona
 - b- cascarilla
 - c- Guaiacum
 - d- Deal wood
 - e- Quassia

- 42- Regarding to Resin (colophony)
- a- Is used as diuretic and stimulant
 - b- Present in guaiacum wood
 - c- Is used in manufacture of paper and synthetic fibres
 - d- Present in Quassia wood
 - e- Both (a) and (b)

- 43- For pernicious malaria attack
- a- Quinine is used in dose 25mg/kg
 - b- Quinine SO_4 can be taken by slow infusion
 - c- Quinine is used in dose not more than 0.5gm/day
 - d- Quinidine is used in dose 0.7-1gm/day
 - e- None of the above

- 44- Canella bark
 a- Is mainly used as fumigating agent
 b- has a chequered appearance
 c- Is called white cinnamon
 d- Used as bitter tonic
 e- both (c) & (d)
- 45- Br_2 Water + Dil. $\text{NH}_4\text{OH} \rightarrow$ Emerald green color with a blue florescence this test;
 a- Called Thaleioquin's test
 b- Called fluorescent test
 c- Gives +ve result with quinidine
 d- Both (a) and (c) e- None of the above
- 46- Periderm in the bark is formed of
 a- Phellem and phelloderm and phellogen
 b- Cork and cork cambium
 c- Cork and cortex
 d- Cork, cork cambium and primary cortex
 e- None of the above
- 47- The cinchona root bark is differentiated from stem bark by:
 a- The presence of epiphytes b- forked fiber
 c- Present as Curved and quills
 d- The absence of epiphytes
 e- Both (b) and (d)
- 48--The following bark is characterized by a chequered appearance
 a- Cascarilla bark b- Quillaia bark
 c- Cinchona bark d- Cascara bark
 e- None of the above
- 49- Upon examining Cascarilla bark microscopically it shows
 a- Lignified cork cells
 b- Raphides of CaOx crystals
 c- Non-lignified phloem fibers
 d- both (a) & (c)
 e- None of the above
- 50- The following bark powders are characterized by the absence of cork cells
 a- Cinnamon and cinchona
 b- Cascara and Cascarilla
 c- Cinnamon and Cassia
 d- Frangula bark
 e- None of the above

Part II (Flowers, Herbs & active constituents, 75 point at one hour)

51. Glycosidal type active constituent can be classified according to the chemical nature of its aglycone into:

- a. Cardic glycosides
- b. Phenolic glycoside
- c. Anthraquinone glycoside
- d. Cyanogeetic glycoside
- e. All of them.

52. Clove is classified as the dried buds of *Eugenia caryophyllus* and can be differentiated from other allied species by:

- a. microscopical examination showed no fragments of phloem fibers with crystal sheath.
- b. React positively with I_2 solution.
- c. React negatively with I_2 solution.
- d. both a & c
- e. None of them.

53. Acidic solution of Red Rose petals gives:

- a. Blue color due to Linamarin.
- b. Blue color due to potassium salt of cyanine glycoside.
- c. Red color due to morphine
- d. Red color due to cyanine glycoside.
- e. None of them.

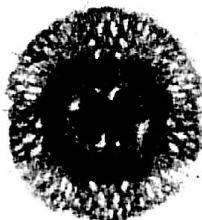
54. The dried aerial part of lobelia can be used as:

- a. Smoking deterrent as it mimics nicotine in action.
- b. Anticholinergic drug as it mimics atropine in action.
- c. Mild laxative
- d. Both a & c
- e. All of them

55. leech is (an annelid worm) used to treat asthma:

- a. This sentence is true.
- b. This sentence is false.

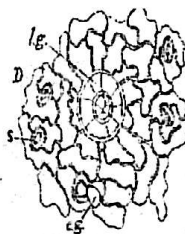
56. The following figures are Not related to Ephedra herb Except:



a.



b.



c.



d.

e. None of them.

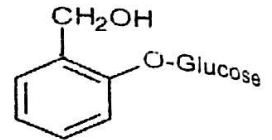
57. Examples of perennial herbs (are).....

- a. Belladonna
- b. Mentha
- c. Ergot
- d. Both a and b
- e. None of them.

58. Concerning to volatile oils, all of the following are correct **EXCEPT** ...
 a. They are produced by several secretory structures such as cells, glands and ducts.
 b. It has carminative, antiseptic and stimulant therapeutic uses.
 c. It's prepared by the enzymatic hydrolysis of anthraquinone glycosides.
 d. Both a & b
 e. None of the above.

59. flower showed receptacle with palea.
 a. Chamomile b. Pyrethrum c. Saffron
 d. both a & b.
 e. None of the above.

60. The opposite Figure is related totype active constituent
 a. Saponnin b. Alkaloids
 c. Glycoside d. Pigments
 e. None of them.



61. Algenic acid substance can be extracted from:
 a. Papaver b. Stramonium c. Fucus d. both a & b
 e. None of them.

62. All of the following plants are used as herbs **EXCEPT** ...
 a. Ergot b. red alga c. Cannabis d. clove bud
 e. All of the above.

63. Ephedrine can mimic (the same) action of adrenaline but with
 a. Orally ineffective dose b. Orally effective dose
 c. prolonged duration of action d. Both b & c
 e. None of the above.

64. The mechanism of action of Ergot in post labor is:
 a. Reducing hemorrhage b. Enhancing the immunity
 c. Serving as an anticoagulant d. Both b & c
 e. All of the above.

65. Saffron is a member of family *Iridaceae*, which gives.....
 a. Buff ppt. with 80% H₂SO₄.
 b. Needle crystals with 50% KOH .
 c. blue color with conc. H₂SO₄.
 d. HCN gas by enzymatic hydrolysis.
 e. None of the above

66. Broom top and Alfalfa are members of family
 a. *Leguminosae* b. *Berberidaceae*
 c. *Papaveraceae* d. *Leguminosae* and *Ranunculaceae* respectively
 e. *Solaneaceae*

67. The dried flower head of *Arnica Montana*, Fam. *Compositae* is the botanical source of...
 a. Arnica b. Calendula c. Saffron d. clove
 e. None of the above

68. The opposite picture is related to

- a. Cannabis b. Pyrethrum c. lobelia
d. Ergot e. Clandula

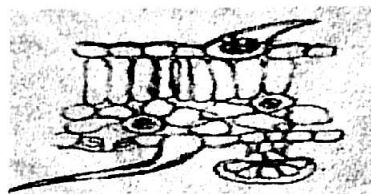


69. Few drops of 50% KOH solution is added to an alcoholic extract of *Eugenia caryophyllus* producing →

- a. Cluster crystals of K eugenate b. no gelatinization
c. Bright green color d. Needle crystals of K eugenate
e. None of the above

70. The opposite T.S is for.....

- a. *Lobelia inflata* pericarp b. *Lobelia inflata* stem
c. *Cannabis sativa* bract d. Mentha leaf
e. None of the above



71. Thioglycosides havetype glucosidal linkage.

- a. N- type b. C-type c. S-type
d. O-type e. None of the above



72. Wormseed plant is used as.....

- a. Bitter stomachic b. Emetic c. Insecticidal d. Anthelmintic
e. None of the above

73.glycoside is the red coloring matter of Saffron.

- a. Cynine b. Crocin c. Carthamin d. Both b & c
e. None of the above

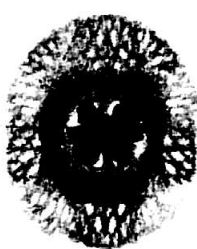
74. The anti-ulcer activity of Fucus (brown alga) is due to....

- a. Algenic acid. b. Carminic acid c. Atropen d. Tannin
e. None of the above

75. The dried sclerotium is the part used of

- a. Lobelia b. Arnica c. Ergot d. Cannabis
e. None of the above.

76. T. S digram in Clove hypanthium:



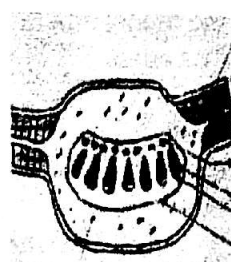
a.



b.



c.

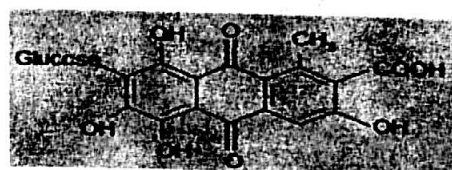


d.

e. None of all

77. Carminic acid hastype glucosidal linkage

- a. N- type b. C-type
c. S-type d. O-type
e. None of the above



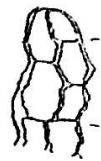
78. A herb possess an anticholinergic properties
 a. Senna b. Belladonna c. Both a and b
 d. Ephedra e. None of them

79. The opposite figure is a key element of.....
 a. Belladonna b. Stramonium
 c. Senna d. Both a & b
 e. None of the above



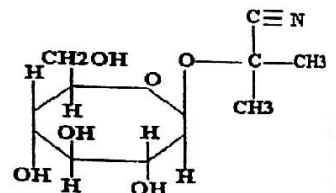
80. Pyrethrins I and II are
 a. Insecticidal drugs
 b. Diaphoretic drugs
 c. The active constituents of Pyrethrum
 d. Both a and c
 e. Both b & c

81. The opposite figure is the key element of.....
 a. Indian hemb b. Indian Tobacco
 c. Calendula d. Ephedra
 e. None of the above



82. Concerning to Alfalfa herb, which of the following sentences are correct:
 a. It contains Digestible protein & vitamins.
 b. It 's used as food for cattle & horses.
 c. It 's used as diluent to adjust the strength of digitalis powder.
 d. A source of chlorophyll.
 e. All of the above.

83. Regarding to the opposite figure, enzymatic hydrolysis of it produces:
 a. Tetrahydrocannabinol b. HCN gas
 c. Glucose d. Both b & c
 e. None of the above



84. Regarding to Hyoscyamos niger herb, all are true EXCEPT...
 a. It contains hyosyamine & hyoscyne.
 b. It is used in the management of migraine
 c. It's classified as annual & biennial herb
 d. Both a & c
 e. None of the above

85. Indian Tobacco is
 a. Senna b. Cannabis c. Lobelia
 d. both b & c e. Mentha

86. The opposite herb is used as.....
 a. Diaphoretic
 b. Hypnotic
 c. Treatment of Amoebic dysentery
 d. Expectorant e. None of the above

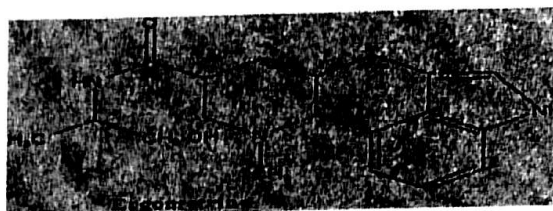


87. Belladonna is used as antidote for

- a. Physostigmine
- b. antidiabetic drugs
- c. Atropine
- d. Hyoscyamine
- e. None of the above

88. The opposite figure represented the main active constituent of Ergot herb, which belongs to....Type active constituent.

- a. Thioglycosides
- b. Alkaloid
- c. Saponin
- d. Tannin
- e. None of them

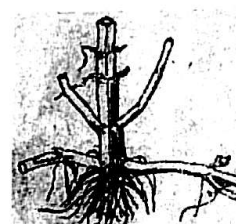


89. Clusters crystals of calcium oxalates are present in the mesophyll of.....

- a. *Atropa belladonna*
- b. *Datura stramonium*
- c. *Hyoscyamus niger*
- d. All of the above
- e. None of them

90. Concerning to Mentha Herb, all are true EXCEPT...

- a. Source of Tannin.
- b. It's classified as a perennial and annual herb
- c. It's a member of family *Labiatae*.
- d. It's used as a cardio tonic drug.
- e. Both b and d

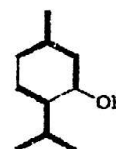


91. are resin combinations type active constituents

- a. Oleo gum resins
- b. oleoresins
- c. Atropine
- d. Both a and b
- e. None of them

92. The opposite Figure is related to type volatile oil active constituent

- a. Saponnin
- b. Alkaloids
- c. Glycosides
- d. Monoterpene
- e. None of them



93. The opposite pictures are related to a solanaceous fruit



- a.
- b.
- c.
- d. Both a & b
- e. None of them

94.is used for treatment of asthmatic new born infants.

- a. Menthol
- b. Eugenol
- c. Lobeline HCl
- d. All of the above
- e. None of them

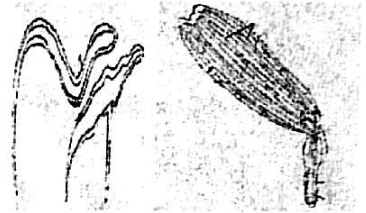
95. Cochineal (invertebrate animal) part used is the dried fertilized female bees of *Dactylopius coccus*, Fam. *Cocoidae*, containing eggs and larvae:
a. This sentence is true. b. This sentence is false.

96. The opposite Figure is related to
a. Indian hemb b. Indian Tobacco
c. Stramonium d. Saflower
e. None of them



97. Laticifrous vessles is enclosed within the phloem region ofHerb.
a. Clove b. Lobelia
c. Mentha d. Arnica e. None of them

98. The opposite figures represent the elements appeared by microscopical examination of.....powderd drug
a. Belladona b. Stramonium
c. Pyrethrium d. Chamomile
e. Both c & d



99. Chamomile is used as.....
a. Carminative b. Insecticidal
c. Diuretic d. All of them e. None of them

100. Hydrolysable tannins can be detected chemically by formation of:
a. Brown ppt. with Br_2 solutions.
b. No brown color with Br_2 solution.
c. brown ppt. with FeCl_3 .
d. Both b & c
e. None of the above.

Examiners:

Associated Prof. / Kamillia Abo-Elsoud

Dr. / Ghada Ismail

Good luck