
	TANTA UNIVERSITY FACULTY OF PHARMACY DEPARTMENT OF PHARMACOGNOSY			
	FINAL EXAM FOR FIRST YEAR STUDENTS			
	COURSE TITLE:	Pharmacognosy		COURSE CODE: 2065
DATE:	08/03/2021	TERM: FIRST	TOTAL ASSESSMENT MARKS: 150	TIME ALLOWED: 120 MINUTES

The exam consists of 8 pages. You are provided with 100 MCQ sentences.

- Sentences 1 to 26 are for seeds part (30 min, 39 marks).
- Sentences 27 to 55 are for fruits part (35 min, 43.5 marks).
- Sentences 56 to 100 are for unorganized part (55 min, 67.5 marks).
- PLEASE record your answer in the provided electronic answer sheet. (120 min, 150 marks).

1- Seed/s giving positive test for cyanogenetic glycosides:

- a- Linseed b- Sweet almond c- Black mustard d- Both A and B

2- Seed/s giving odour of benzaldehyde on trituration with water:

- a-Linseed b- Sweet almond c- Bitter almond d- Both B and C

3- Ricinine alkaloid in castor presents in:

- a-Endosperm b- Caruncle c- Embryo d- Outer coat

4- Seed/s of family Sterculiaceae and contain/s theobromine:

- a-Coffee b- Kola c- Calabar beans d- Nigella

- For sentences (5-8) choose from:

- a-Quinoa b- Sesame c- Chia d- Psyllium

5- Some species can be used for chronic constipation and others for diarrhea.

6- Nutritive and used in weight loss due to high content of protein and fiber.

7- Calcium supplement and reduces oxidative stress markers.

8- Contains unsaturated fatty acids such as linoleic and linolenic.

- For sentences (9-12), choose from:

- a-Colchicum b- Strophanthus c-Nux vomica d- Castor

9- A seed without outgrowth.

10- Contains cardiac glycosides.

11- Used in gout.

12- Its oil is used for constipation.

- For sentences (13-16), choose from:

- a- Nutmeg b- Black mustard c- Stramonium d- White mustard

13- Mace is made from its outgrowth.

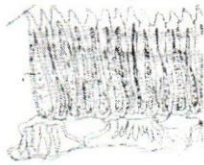
14- Gives Positive Vitali's test.

15- Contains pigment layer.

16- Contains sinalbin.

- For (17-20), choose from:

- a- Strophanthus b- Foenugreek c- Nux vomica d- Cardamom



17



18



19



20

- For (21-24), choose from:

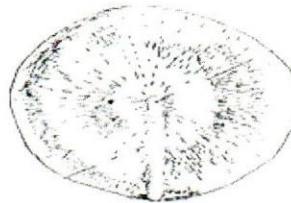
- a- Nux vomica b- Foenugreek c- Strophanthus d- Cardamom



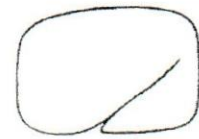
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22



23



24

25- Lowers the cholesterol concentration in the liver of animals and has laxative action:

- a- Cardamom b- Linseed c- Strophanthus d- Nux vomica

26- Increases milk production:

- a- Black mustard b- Bitter almond c- Foenugreek d- Linseed

27- Avocado is berry fruit, while Mulberry is aggregate fruit

- a- True b- False

28- Siliqua is two carpels fruit splits.....

- a- Along same side
- b- Along one side only
- c- Along two sides with septum
- d- Along multiple sides

29- Regma is multilocular ovary which splits into mericarps double the number of carpels

- a- True b- False

- 30- Samara fruit is
- a- Tri-carpellary fruit
 - b- Contains pericarp fused with testa
 - c- Like maize & wheat
 - d- Winged unilocular fruit

- 31- Figure A.....
- a- Has antirheumatic activity
 - b- Doesn't interact with ciprofloxacin
 - c- Is the dried fruit of *Cuminum cyminum*
 - d- Inhibits proliferations of the cells



Figure A

- 32- Figure B.....
- a- Has anticandidal activity
 - b- Shaggy hair is the key element of this fruit
 - c- Is one of umbelliferous fruits
 - d- Is used in manufacture of Tamiflu®



Figure B

- 33- Concerning to *Ammi majus* fruit:
- a- Furanochromone is the major active constituents
 - b- Kellagon® is one of drug preparation in markets
 - c- Ulteramedanine® is used in alopecia and psoriasis
 - d- Gives red fluorescence under UV

34- Essential oils, flavonoids apigenin, coumarins and furanocoumarins (e.g bergapten) are the active constituents of.....

- a- Dill
- b- Cumin
- c- Coriander
- d- Celery

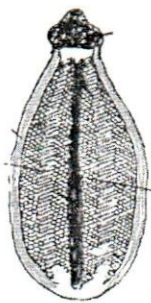
35-fruit has diuretic, emmenagogue, hallucinogenic and MAO inhibitor

- a- Dill
- b- Parsely
- c- Coriander
- d- Celery

36- The dried peel of *Citrus aurantium* has volatile oil (citril & citronellal), pectin, flavonoid glycoside hisperidin and traces of vitamins A, B and C

- a- True
- b- False

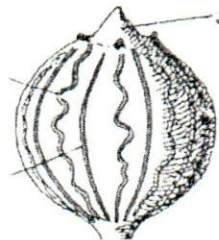
Match the following fruits (Q 37-39) with the seed type enclosed in List I:



37-



38-



39-

List I:

- a- Orthospermous
- b- Coelospermous
- c- Campylopermous
- d- Schizospermous

40- Figure C is the dried ripe fruits of *Vanilla vomifolia*, Fam. *Orchidaceae*

- a- True
- b- False



3

Figure C

41- Milk thistle fruit is all the following except:

- a- Dried ripe pappus –free fruit of *Silybum marianum*
- b- Silymarin®, Ursosalk®, Legalon® are some preparation in markets
- c- Relief dyspeptic, liver and gallbladder complaints
- d- Milky sap of the plant was used to soften calluses

42- Fruit of figure D

- a- Induces apoptosis and cell cycle arrest in HepG2 cell line
- b- Contains wild and cultivated seeds
- c- Contains terpenoid oil, piperine alkaloid and resins
- d- Is the dried ripe fruit of *Capsicum minimum*

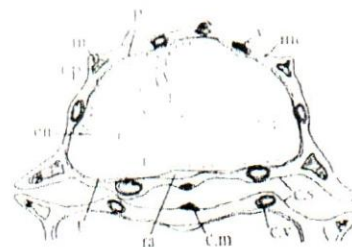


Figure D

43- Wheat germ oil contains meconic acid, morphine, codeine and thebaine which prevents aging and loss of skin elasticity

- a- True
- b- False

44- Figure E is a T.S. inpericarp.

- a- Colocynth
- b- Capsicum
- c- Coriander
- d- Celery

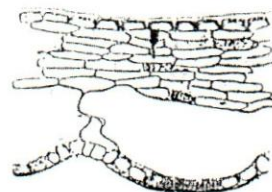


Figure E

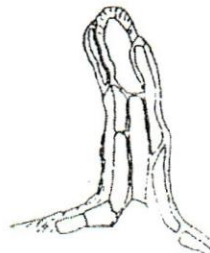
Match the following key element of the fruits (Q 45-47) with the uses in List II



45-



46-



47-

List II:

- a- Counter irritant
- b- Food preservative
- c- Good source of iron
- d- Antispasmodic

48-The general toxicity of Hemlock is respiratory failure, stimulation of nervous system followed by paralysis

- a- True
- b- False

49- Tailed pepper:

- a- Has diuretic and urinary antiseptic actions.
- b- Has an alkaloid consists of hesperidin derivative.
- c- With 80% H₂SO₄ → green color
- d- Treats diabetic patients

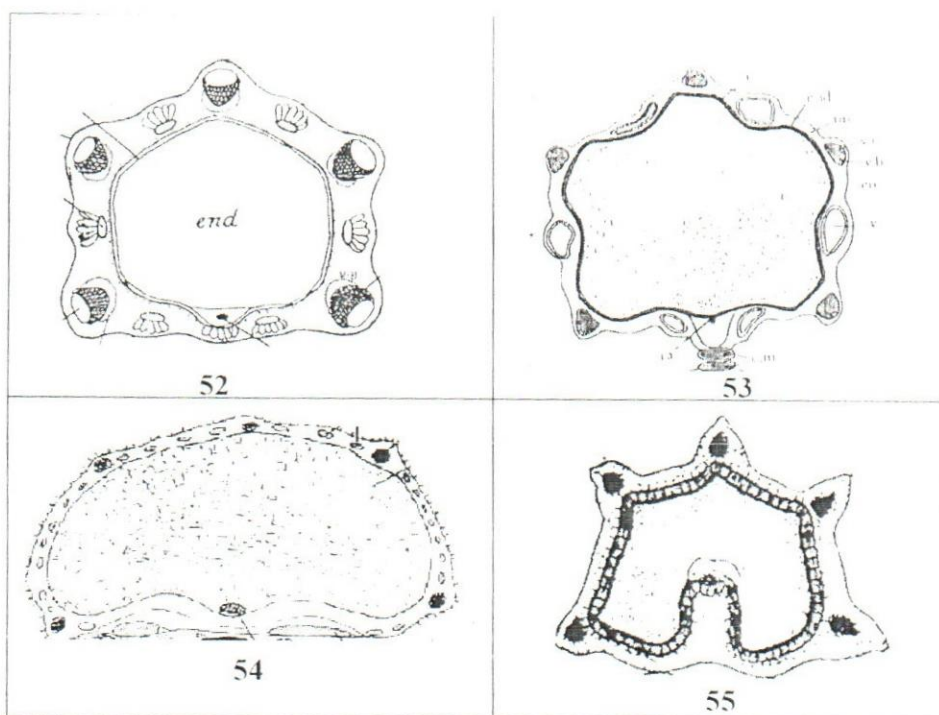
50- The Dried nearly ripe capsules of *Papaver somniferum*, F. *Papaveraceae* is part used of

- a- Long pepper
- b- Poppy capsule
- c- Star anise
- d- Cubbes

51- Steroids (β-sitosterol and its glucosides), flavonoids, water-soluble polysaccharides and fatty oils are the active constituents of.....

- a- Dill
- b- Saw palmetto
- c- Coriander
- d- Bilberry

Match the following T.S. of the fruits (Q 52-55) with the name of fruit List III



- List III**
 a- Hemlock
 b- Anise
 c- *Ammi visnaga*
 d- Caraway

56. An example of pathologically produced unorganized drugs is
- a. Acacia gums b. Aloe juices c. Bees waxes d. Opium latex
-
57. Decoction, maceration, and infusion are methods for herb
- a. Incision b. Storage c. Extraction d. Interaction
-
58. Black catechu extract is prepared from the of *Acacia catechu*.
- a. Fruits b. Seeds c. Leaves d. Heartwood
-
59. Pale and black catechu can be differentiated based on
- a. Condensed tannins
 b. Quercetin
 c. Protein precipitation
 d. Gambir fluorescein
-
60. Pale and black catechu are used in industry.
- a. Juice b. Tanning c. Fire works d. Paper
-
61. Agar-agar is used as in bacterial cultures.
- a. Internal standard b. Solidifying agent c. Nutrient d. Coloring agent
-
62. Glutin is in nature.
- a. Protein b. Carbohydrate c. Fat d. Resin
-
63. Gelatin is product.
- a. Fungal b. Algae c. Animal d. Plant

-
64. Aloe dried juice is used as
- a. Hypnotic b. Anti-inflammatory c. Anti-diabetic d. Purgative
-
65. Borax test is specific for
- a. Barbaloin
b. Aloe-emodin
c. Isobarbaloin
d. Combined anthraquinone
-
66. Several incisions are made in the Opium capsules for
- a. Latex exudation b. Latex induction c. Marking d. Latex extraction
-
67. Morphine has action.
- a. Anti-diabetic b. Purgative c. Anti-tussive d. Sedative
-
68. Addition of guaiacum tincture and H₂O₂ to gum arabic gives blue color due to
- a. Arabic acid b. Meconic acid c. Oxidase enzyme d. Starch
-
69. is the water-soluble fraction of gum tragacanth.
- a. Arabic acid salt b. Starch c. Tragacanthin d. Bassorin
-
70. I₂ solution gives color with gum tragacanth.
- a. Green b. Blue c. Yellow d. Crimson red
-
71. Microscopical examination of honey can show
- a. Sucrose crystals b. Pollen grains c. Epidermal cells d. Diatoms
-
72. Manna has a taste.
- a. Nauseous b. Acrid c. Bitter d. Sweet
-
73. Manna induces laxative activity through mechanism.
- a. Electrolytes transport
b. Intestinal motility
c. Irritation
d. Osmotic
-
74. Inverted sugar is composed of glucose and
- a. Sucrose b. Glucose c. Galactose d. Mannitol
-
75. Fixed oils and fats are esters of fatty acids and
- a. Melissyl alcohol b. Cetyl alcohol c. Glycerol d. Sorbitol
-
76. Fixed oils can saponified by alkalis.
- a. Aqueous b. Ethanolic c. Alcoholic d. Chloroformic
-
77. Cod-liver oil is rich in vitamin
- a. E b. D c. C d. K
-
78. Olein and palmitin are the major constituents of
- a. Cod-liver oil b. Lard c. Olive oil d. Beeswax
-

79. is used for candle production.

- a. Gums b. Fixed oils c. Beeswax d. Lard

80. Resins are insoluble in

- a. Chloral hydrate b. Fixed oils c. Alcohol d. Water

81. An example of a resin composed mainly of glycosidal resin is

- a. Colophony b. Myrrh c. Podopyllum d. Copaiba

82. Colophony is mainly composed of

- a. Resin acids b. Resin esters c. Resenes d. Glycosidal resins

83. Colophony is derived from

- a. Volatile oils b. Turpentine oil c. Balsams d. Oleo-gum-resins

84. Copper salt of abietic acid has color.

- a. Colorless b. Wine red c. Emerald green d. Violet

85. Guaiac blue is the product of α -guaiaconic acid.

- a. Hydrolyzed b. Adsorption c. Reduction d. Oxidation

86. The cannabis resin (Cannabinoids) is composed mainly of as THC.

- a. Resin acids b. Resin phenols c. Resenes d. Glycosidal resins

87. Canada balsam belongs to class.

- a. Balsams b. Oleo-gum-resins c. Oleo-resins d. Resins

88. The male fern resin is an example of type.

- a. Unknown b. Prepared c. Pathological d. Natural

89. Filmarone is a constituent of

- a. Canada balsam b. Colophony c. Filix-mas d. Cannabis

90. The offensive odor of Asafoetida is due to the presence of

- a. Disulphides b. Cineol c. Terpinyl acetate d. Ascaridole

91. The positive result (blue fluorescence) of Asafoetida with HCl/ammonia is due to the presence of

- a. Benzoic acid b. Cinnamic acid c. Ferulic acid d. Commiphoric acid

92. Myrrh is found in the in the phloem of *Commiphora molmol*.

- a. Oleo-resin cells
b. Glandular hairs
c. Laticiferous ducts
d. Schizolysigenous cavities

93. Trituration of Myrrh and Asafoetida with water gives emulsion due to the presence of

- a. Fixed oils b. Gums c. Resins d. Volatile oils

94. Asafoetida is used as

- a. Nerve stimulant b. Purgative c. Sedative d. Hypnotic

95. Balsams are characterized by the presence of high content of

- a. Esters b. Aromatic acids c. Phenols d. Glycosides

96. Balsams, as balsam of Peru, are usually a component of preparations.

- a. Antacids b. Paints c. Purgative d. Cough

97. Siam benzoin has odor.

- a. Vanillin b. Methyl salicylate c. Menthol d. Cinnamon-like

98. Sumatra benzoin powder gives the odor of upon reaction with KMnO_4 .

- a. Menthol b. Benzaldehyde c. Eugenol d. Cinnamic aldehyde

99. The alcoholic solutions of balsams of Tolu and Peru are to litmus paper.

- a. Acidic b. Neutral c. Basic d. Not applicable

100. Resinotannols gives result with FeCl_3 solution.

- a. Negative b. Positive c. Non-reactive d. Yellow color
-

Best wishes