
	TANTA UNIVERSITY FACULTY OF PHARMACY DEPARTMENT OF PHARMACOGNOSY				
	FINAL EXAM FOR PRE-PHARMACY STUDENTS				
	COURSE TITLE:	Medicinal Plants		COURSE CODE: 1135	
DATE:	9/6/2015	TERM: SECOND	TOTAL ASSESSMENT MARKS: 150	TIME ALLOWED: 2 HOURS	

The exam. include two parts:

Part I include two questions:

Question No. 1:.....(20 POINTS, 25 MIN.)

Question No. 2:.....(50 POINTS, 35 MIN.)

Part II:.....(80 POINTS, 60 MIN.)

- All questions must be answered in the specified TABLES and ANSWER SHEET using blue pen.

- Answers using the pencils will not be accepted.

PART II:----- (70 Points, 60 min.)

All questions should be attempted.

Question No I:

A- Give only one drug for the following constituents then mention the biological origin and uses for each. (10 points)

Constituents	Biological origin	Uses
Cardiac glycosides		
Anthraquinon glycosides		
Volatile oils		
Alkaloids		
Resins		

B- Enumerate the different forms of calcium oxalates and give only one drug in which each of these forms is present. (10 point)

Forms	Drug
1-	
2-	
a-	
b-	
c-	
3-	
4-	
5-	
6-	

Question no II

(50 point)

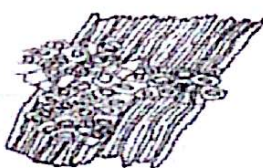
For each of the following families choose the suitable elements which confirm the characters , then mention the order , the secretary structure and only one drug to which it related .

Put your answer in the following Table by letters.

family	Chosen elements	order	Secretary structure	drug
Labiatae				
Graminae				
Fabaceae				
Cannabinceae				
Solanaceae				
Umbelliferae				
Compositae				



A



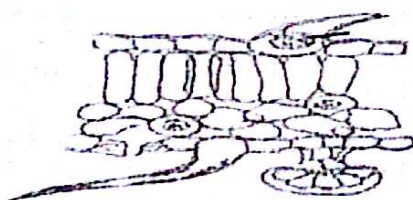
B



C



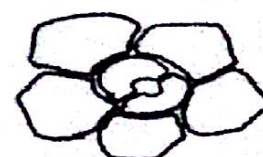
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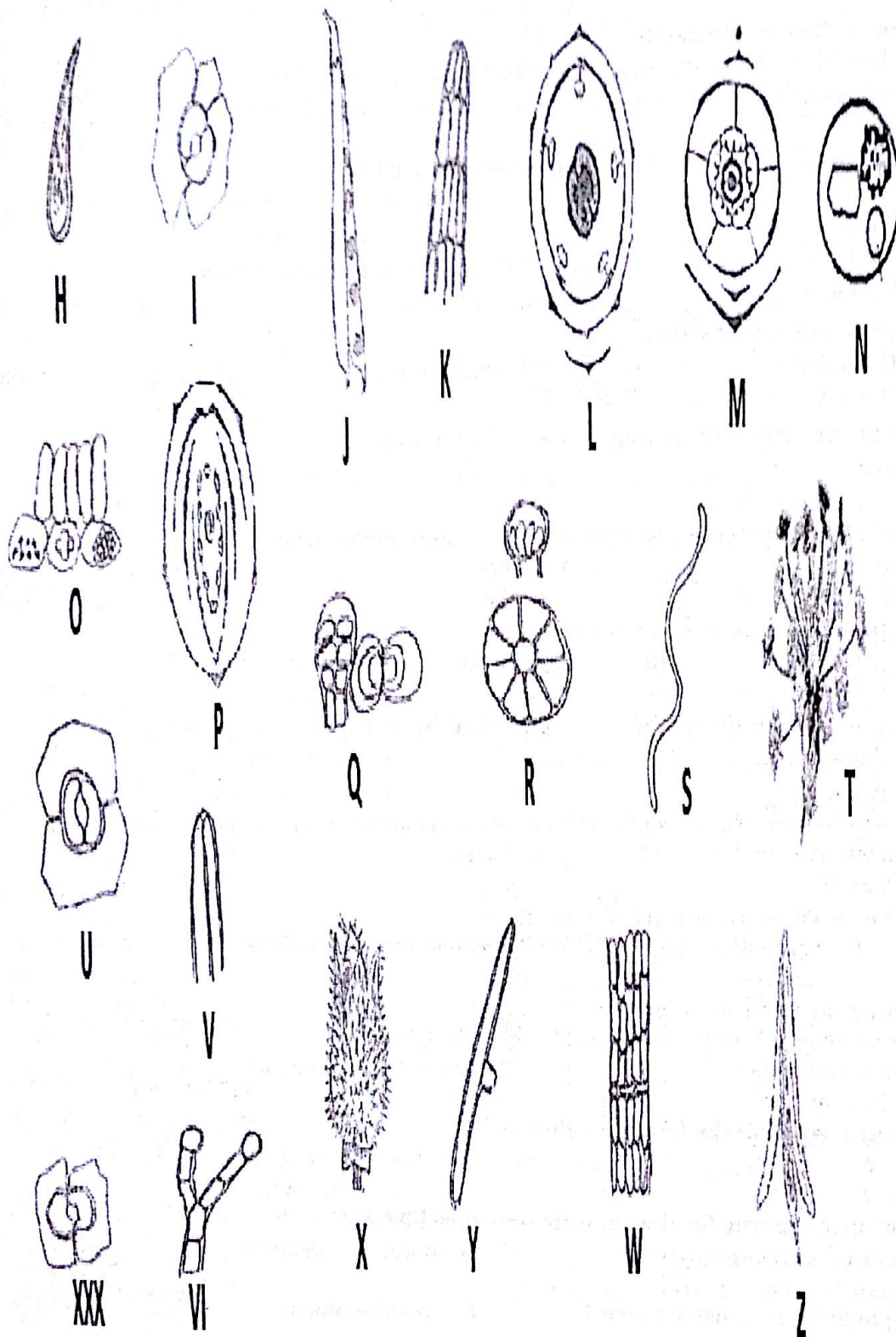
E



F

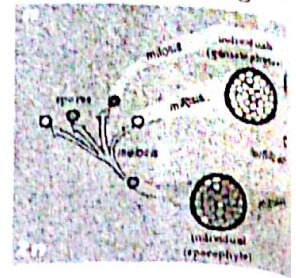


G

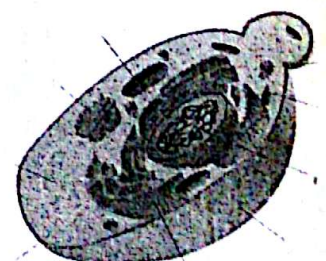
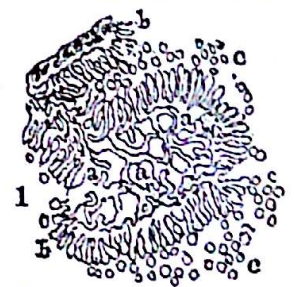
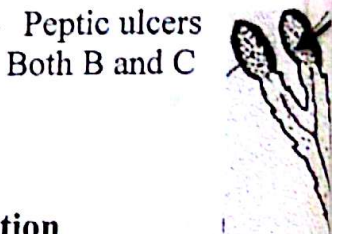


PART (II)

You are provided with 50 multiple choice questions; select only one correct answer by filling in the blank spaces in the Answer Sheet:



- 1- The opposite figure represents:
 - A- The life cycle of organisms
 - B- Sporophyte generation
 - C- Alternation of generation
 - D- Gametophyte generation
 - E- None of them
- 2- Kingdom Protista may include the following EXCEPT:
 - A- Algae
 - B- Protozoa
 - C- Autotrophic
 - D- Prokaryotic
 - E- Eukaryotic
- 3- "Ferns" are:
 - A- Seedless and vascular
 - B- Sometimes used as function foods
 - C- Spermatophyta
 - D- Both A & B
 - E- Both B & C
- 4- Liverworts and mosses are:
 - A- Bryophyta
 - B- Thallophyta
 - C- Contain chlorophyll
 - D- Both A & C
 - E- Both B & C
- 5- Gymnosperms differ from angiosperms in having:
 - A- Seeds
 - B- Fruit
 - C- Vessels in wood
 - D- Flowers
 - E- None of them
- 6- The glycoprotein of *Laminaria Japonica* can be used for treatment of:
 - A- Colon cancer
 - B- Aid labor
 - C- Peptic ulcers
 - D- Both A and C
 - E- Both B and C
- 7- In the opposite plant, the arrow is pointed to:
 - A- Hapteron
 - B- Reproductive organ
 - C- Conceptacles
 - D- Both A and B
 - E- Both B and C
- 8- is belongs to family *Gelidiaceae* and used in chronic constipation
 - A- Agar Agar
 - B- Fucus
 - C- Diatomite
 - D- Both A and B
 - E- Both A and C
- 9-could be used for synthesis of cortisone and steroidal hormones via biotransformation.
 - A- *Saccharomyces* spp.
 - B- Fungi
 - C- *Aspergillus niger*
 - D- Both A and C
 - E- *Claviceps purpurea*
- 10-.....could be used for treatment of boils.
 - A- Fungi
 - B- *Aspergillus niger*
 - C- *Penicillium notatum*
 - D- Yeast
 - E- Both A & C
- 11- Concerning the opposite structure:
 - A- Cross-section of the ovary of Rye plant
 - B- Sphacelia
 - C- Contains conidophores
 - D- Contains mycelium
 - E- All of the above
- 12- Ergotamine has one of the following effects:
 - A- Analgesic
 - B- Oxytocic
 - C- Convulsions
 - D- Aid labor
 - E- None of them
- 13- The followings are true for the opposite structure EXCEPT:
 - A- Cells of *Saccharomyces* spp
 - B- Source of vitamin B
 - C- Belongs to Ascomycetes
 - D- Reproduction: sexual or asexual
 - E- Contains protein



14- All medicinal mushrooms contain:

- A- Polysaccharide B- β -D-glucan C- Chitin D- Both A and B E- Both A and C

15- In case of lichen:

- A- Fungi and algae live in symbiosis B- Fungi, algae and cyanobacteria live in symbiosis
C- Fungi has the most benefit D- Algae has the least benefit E- All of them

16- The following plant contains galactomannan with immunostimulating effect.

- A- *Cetraria islandica* B- Iceland moss C- Peat moss
D- Both A and B E- Both A and C

17- The opposite plant is:

- A- Antiseptic B- Organic soil conditioner
C- Used in absorbent dressings D- Both A and B E- All of them

18- All of the followings are true for Horsetails EXCEPT:

- A- Belongs to family *Equisetaceae* B- Seed plant
C- Diuretic D- Source of silicon E- Belongs to Phylum Pteridophyta

19- *Dryopteris erythrosora*:

- A- Contains flavonoid B- Antioxidant C- Anticancer
D- Function foods E- All of them

20-..... is (are) widely used homeopathic medicine for the liver, urinary and digestive disorders.

- A- Dusting powders B- Diatomite C- *Lycopodium clavatum*
D- Both A and C E- Both A and C

21- Oil of turpentine is:

- A- Used for preparation of plasters B- Used for preparation of ointments
C- Used for preparation of printing inks D- All of them E- None of them

22- is antiasthmatic drug.

- A- *Taxus* B- *Pinus* C- *Ephedra* D- *Ginkgo* E- None of them

23- Death Tree is:

- A- Dioecious B- Contains taxol C- Anticancer D- All of them E- Both B & C

24- Only three berries of *Taxus brevifolia* can produce:

- A- Death B- Anticancer effect C- Immunostimulating effect
D- Both B and C E- None of them

25- The opposite plant is:

- A- Belongs to Gymnosperms B- Has a perianth C- Contains alkaloids
D- Both A and C E- All of them

26-..... is used for treatment of memory losses.

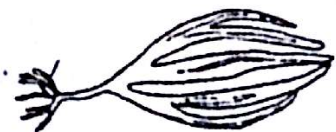
- A- *Taxus* B- *Pinus* C- *Ephedra* D- *Ginkgo* E- *Dryopteris erythrosora*

27- Severe illness and death can result from the ingestion of

- A- *Agaricus campestris* B- *Amanita muscaria*
C- Ergot D- Both A & C E- Both B & C

28- The opposite plant could be used as

- A- Counter irritant B- Abortive
C- Aid labor D- Both B and C
E- All of them



29- Na, Al, Si, Cl and I₂ are....

- A- Macro-elements B- Active elements C- Inactive elements
D- Micro-elements E- None of them

30- Cell division hormones are

- A- Auxins B- Gibberellins C- Cytokinins D- Both B and C E- All of them

31- Gums and gum resin should be collected in....

- A- Wet weather B- Dry weather C- Both A and B
D- Any time of the year E- None of the above

32- Rhubarb contains anthraquinones in....

- A- Spring B- Summer C- Winter D- Autumn E- Both C and D

33- The highest % of active constituents in digitalis leaves is in/at

- A- Afternoon B- Noon C- Early morning D- Night E- Both A and C

34- During drying process, bad odors of some drugs are lost as....

- A- Digitalis B- Vanilla pods C- Hyoscymus D- Both A and C E- All of them

35- Mixture of (ginger + wheat flour + capsicum) is a kind of adulteration named.....

- A- Substitution B- Sophistication C- Deterioration D- Admixture E- Inferiority

36- Use of scopolia leaves instead of belladonna leaves is a kind of adulteration named.....

- A- Substitution B- Sophistication C- Deterioration D- Admixture E- Inferiority

37- The kind of adulteration when citral is added to lemon oil is

- A- Substitution B- Sophistication C- Deterioration D- Admixture E- Inferiority

38- Differentiation of senna and belladonna by ratio values is done by....

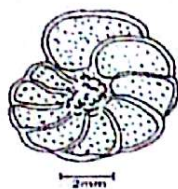
- A- Stomatal index B- Vein-islet number C- Palisade ratio
D- Both A and C E- All of them

39- Concerning to the opposite picture:

- A- The common name is club moss.
B- Its powder burns with a brilliant flash.
C- It is Yellow powder lighter than water and unaffected by dil. acids and alkalis.
D- It is used as a standard reference in quantitative microscopy.
E- All of the above.



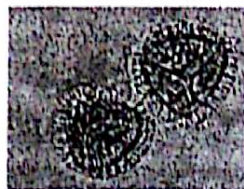
40- Rottlerin and isorottlerin are isolated from drugs has the figure No.



A



B



C



D



E

41- Figure D in question No. 40 is

- A- A pinnate form of diatoms. B- Used for filtration.
C- Used in Chromatography. D- Both B & C.
E- All of the above.

42- The opposite picture is the source of.....

- A- Prepared chalk B- Diatoms C- China clay
D- French chalk E- Precipitated chalk

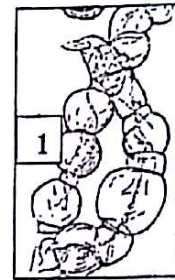


43-consists chiefly of pure aluminum silicate with traces of Mg, Ca and Fe oxides.

- A- Prepared chalk B- Diatoms C- China clay
D- French chalk E- Precipitated chalk

44-consists of hydrated magnesium silicate in addition to traces of Al and Fe oxides.

- A- Prepared chalk B- Light kaolin C- Light kaolin
D- Talc E- Precipitated chalk



45- No. 1 in the opposite picture refers to

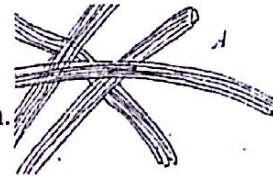
- A- Cotton fiber mounted in glycerol.
B- Absorbent cotton in cuoxam. C- Raw cotton in cuoxam.
D- Apexes of hairs. E- None of the above.

46- ... fiber/(s) stain(s) blue with N/50 I₂ followed by 66% H₂SO₄.

- A- Rayon B- Flax C- Wood cellulose D- Absorbant cotton E- All of them

47- The opposite figure is used for.....

- A- The manufacture of non-absorbable sutures.
B- The manufacture of filtering media and coarse bags.
C- The manufacture of lint and linen cloth used as a filtration medium.
D- The manufacture of flannel and bandages
E- Making lint, gauze and other surgical dressings



48- The opposite figure.....

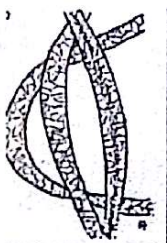
- A- Gives no blackening with PbAc and caustic soda.
B- Consists of keratin (containing C, H, O, N and S).
C- Sol. in conc. HCl, 66% H₂SO₄, and cuoxam but not in caustic alkalis.
D- Consists of the protein fibroin coated externally by sericin (C, H, O and N).
E- Is used in manufacture of ligatures and some sieves.



49- Flax

- A- Is the pericyclic fibers removed from the stem of *Linum usitatissimum*, fam. Linaceae
B- Consists of hemicelluloses
C- Consists of pectocellulose.
D- Both A & C E- Both A & B

50- Figuregives +ve tests for lignin.



A



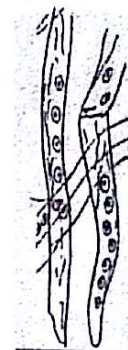
B



C



D



E

Answer Sheet

No.	A	B	C	D	E	No.	A	B	C	D	E
1						26					
2						27					
3						28					
4						29					
5						30					
6						31					
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Good Luck