



October University for Modern Sciences & Arts

Final Exam

Faculty	Pharmacy
Department	Pharmacognosy
Module Code	PHG 112 (level 1)
Module Title	Pharmacognosy
Semester	Fall 2023
Date	13/1/ 2024
Time Allowed	2 hours
Total Mark	60 Marks
No. of Pages	3/ 3 (cover page is not included)
Material provided	----
Equipment permitted	Calculator
Additional Instructions	All answers must be in English otherwise they will not be considered

No books, paper or electronic devices are permitted to be brought into the examination room other than those specified above.

All questions are to be answered and illustrate your answer with a drawing when required. The exam contains three pages. **ALL ANSWERS MUST BE IN THE ANSWER PAPER.**

(60 marks)

Question 1: In a tabular form mention the part used (0.5 mark), one main active constituent (0.5 mark), one use (0.5 mark), and a chemical test (0.5 mark), for the following drugs. (10 Marks, 2 marks each)

Vinca, Star anise, Capsicum, Opium and Licorice

Question 2: Answer the following cases (27 marks)

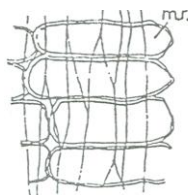
I-A 23 years old female suffering from migraine and fungal infection. (6 marks)

- 1- Recommend **a drug** to manage her migraine (1 mark), mention **its main active constituents** (1 mark), **and how can you test for these active constituents** (1 mark).
- 2- Suggest a drug to treat her fungal infection (1 mark), mention **its main active constituents** (1 mark), **and the steps to test for these active constituents** (1 mark).

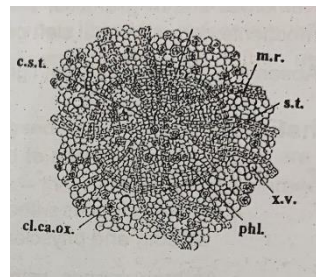
II- Mrs. Marwa (27 yrs.) was diagnosed with acute constipation. The following drug was prescribed to her. (6 marks)



1



2



3

1- Identify the given key elements from (1-3). (1.5 marks, 0.5 mark each)

2-State **the name** (1 mark), **part used** (0.5 mark), and **main active constituents** (1 mark) of this drug.

3-How can you confirm by a laboratory test the identity of this drug? (1 mark)

4- Criticize the appropriateness of taking the medication while pregnant.. (1 mark)

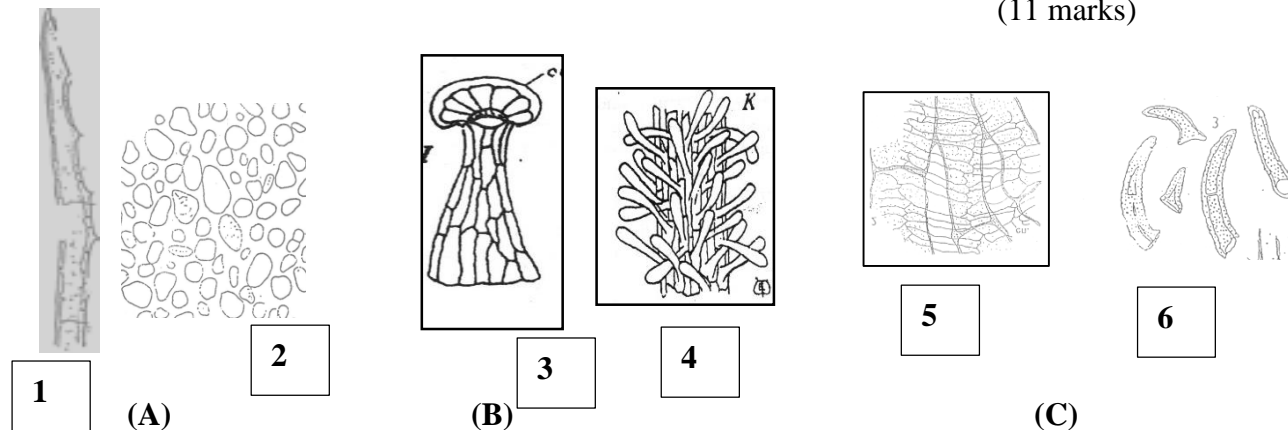
III- A 50-year-old male presents to the clinic suffering from vitiligo. (4 marks)

a- Suggest a **drug name** (1 mark) that is likely to be efficient in the treatment regimen and mention **its main active constituents** (1 mark).

b- How would you test for this drug? (1 mark)

c- How can you differentiate between this drug and its other species? (1 mark)

IV-A medicinal company has started the production of an anti-emetic drug during pregnancy. The quality control unit was supplied with the shown samples (A, B&C) before starting the synthesis. (11 marks)



- Identify **the name of** drug (A),(B), and (C) (1.5 marks, 0.5 mark each) and the given **labels** from (1-6) (3 marks, 0.5 mark each).
- For each drug, mention the **part used**, the **main active constituent** and the **steps to test for these active constituents** (4.5 marks, 1.5 marks each)
- How would you destroy the pungency of drug (A)? (1 mark)
- As a quality control specialist, which drug from (A-C) is the best choice for this preparation? (1 mark)

Question 3:

Complete the given table, then answer the following questions: (10 marks/0.5 mark each)

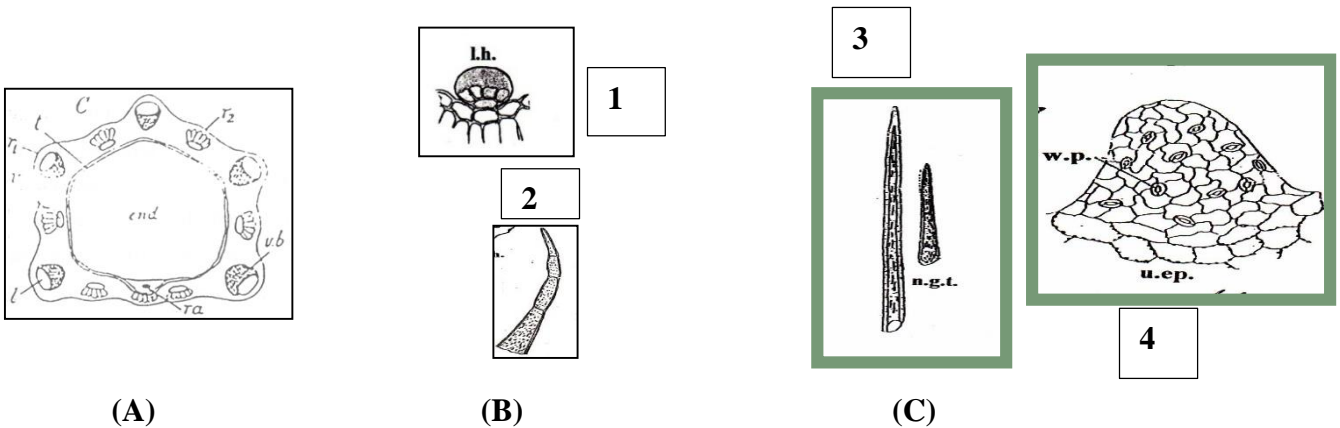
	Drug name	Part used	Main active constituent	One use	Chemical test
A		oleo-gum-resin			
B	Hemlock				
C				used as a coloring matter for tooth-pastes	
D			ephedrine		
E		the pithy pulp of a pepo fruit			

Question 4: Enumerate TWO of each of the following: (5 marks, 0.5 mark for each sentence)

- Bulk laxative drugs.
- Hallucinogenic drugs.
- Branching of aerial stems.
- Seeds with the same type of embryo.
- Antihypertensive drugs from different organs.
- Circulatory stimulant drugs.

- g- Drugs safe during pregnancy.
- h- Different characters of family Apiaceae.
- i- Different drugs that are added to purgative preparations to prevent the gripping effect.
- j- Seeds decrease cholesterol.

Question 5: You are supplied with a tea bag composed of three drugs detected from the following drawings: (8 marks)



- a) Suggest **ONE** common medicinal use for this mixture. (1 mark)
- b) Identify the key elements (1-4) (2 marks, 0.5 each), then identify the corresponding drugs (A, B & C). (1.5 marks)
- c) For drugs (**A & C**), mention the **part used** (1 mark), **main active constituent** (1 mark) **and the steps to test for these active constituents** (1.5 mark). (3.5 marks)

----- End of questions