



## **October University for Modern Sciences & Arts Final Exam**

<b>Faculty</b>	<b>Pharmacy</b>
<b>Department</b>	<b>Pharmacognosy</b>
<b>Module Code</b>	<b>PHG 112</b>
<b>Module Title</b>	<b>Pharmacognosy</b>
<b>Semester</b>	<b>Fall 2022</b>
<b>Date</b>	<b>12/1/2023</b>
<b>Time Allowed</b>	<b>2 hours</b>
<b>Total Mark</b>	<b>60 Marks</b>
<b>No. of Pages</b>	<b>3</b>
<b>Material provided</b>	<b>-</b>
<b>Equipment permitted</b>	<b>-</b>
<b>Additional Instructions</b>	<b>All Answers must be in English otherwise it will not be considered.</b>

**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 drawing when required. The examination is located in **THREE** pages. **ALL ANSWERS MUST BE IN THE ANSWER PAPER.** (Total: 60 marks)

**Question I: Answer the following cases (18 marks)**

**A- A 9-months pregnant female gave birth to a boy who immediately suffered from severe difficulty in breathing and asphyxia. (5 marks)**

1-What seems to be the drug of choice for the resuscitation of this newborn? (1 mark)

2-Identify the main active constituent of this drug. (1 mark)

- **One week later the mother was suffering from a low milk secretion.**

3-As a community pharmacist, suggests the name of two fruits (1 mark, 0.5 mark each) that promote her milk production and mention their main active constituents. (2 marks, 1 mark each)

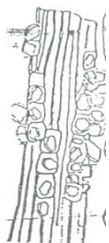
**B- A 31-yr-old woman with a history of migraines came to the emergency department because of a severe headache. Also, she was complaining of low back pain (lumbago). (6 marks)**

1- Recommend a herb to manage her migraine (drug name (0.5 mark), main active constituents (1 mark), chemical test (1 mark)).

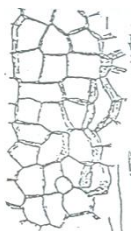
2- Suggest a herbal drug to control her low back pain (drug name (1 mark), active constituents (1 mark), one other use (0.5 mark)).

3- What are the potential side effects of using this drug topically for the treatment of her low back pain? (1 mark, 0.5 mark each)

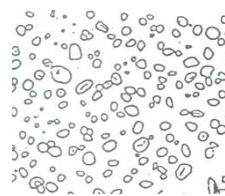
**C-Mrs. Sarah (27 yrs) was hospitalized with acute pain in her stomach and hematemesis. She was diagnosed with peptic ulcer. The following drug was prescribed to her. (7 marks)**



1



2



3

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


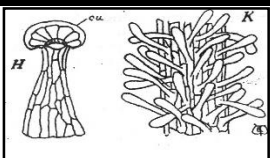
2-State the name (0.5 mark), part used (0.5 mark), main active constituents (1 mark) and **one medicinal purpose** (1 mark) of this drug.

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

4-During her hospitalization, they discovered that she is pregnant in 2 months. The physician prescribed to her DGL. Critically analyze this statement. (1.5 marks)

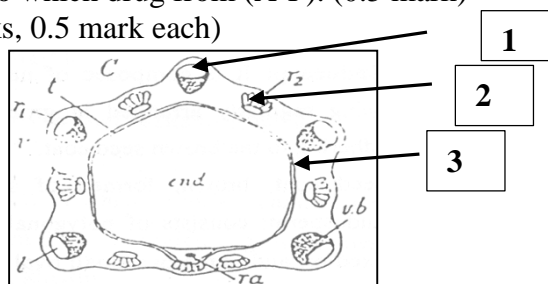
**Question II: (22 marks)**

**Complete the given table, then answer the following questions: (13 marks/0.5 mark each)**

	Drug name	Part used	Main active constituent	One use	One key element	Chemical test
A						
B	Star anise					
C			Khellin			
D						Test for meconic acid
E						
F	Pancreas					

- Referring to plants from (A to F), answer the following questions: (9 marks)

- 1-What motive is there for the use of drug (B) as antiviral? (1.5 mark)
- 2- State the name (1 mark) and main active constituents (1 mark) of the other species of (C).
- 3-During your practical exam, you were given an entire sample of drug (C) and its other species. Mention two morphological differences that can give you a clue. (2 marks, 1 mark each)
- 4-What would result upon the long term use of drug (E)? (1.5 marks)
- 5- i-The given T.S. is correlated to which drug from (A-F). (0.5 mark)  
 ii-Identify the labels. (1.5 marks, 0.5 mark each)

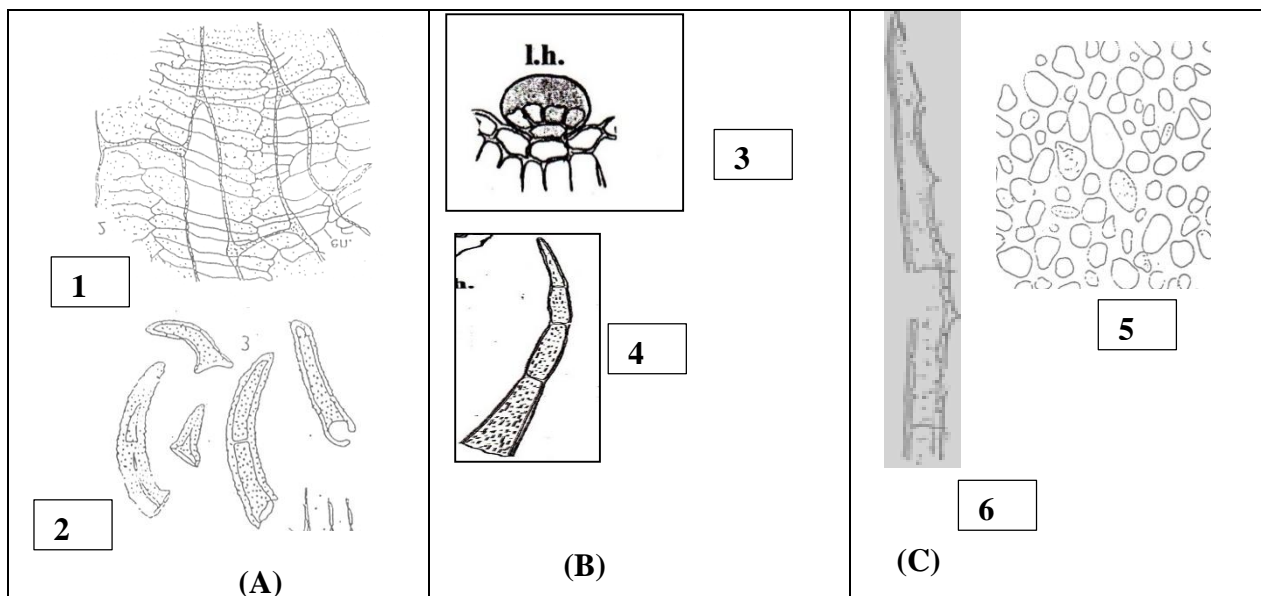


**Question III: Answer as shown between brackets: (6 marks)**

- 1-Explain two general histological characters of family Umbelliferae. (2 marks, 1 mark each)
- 2-Cochineal is used as a coloring matter for tooth-pastes. (Give reason) (1 mark)
- 3-Coriander can be used as animal feed. (Discuss). (1 mark)
- 4-What would happen to your body if you ingest linseed in your daily food? (2 marks, 4 points 0.5 each)

**Question IV: (9 marks)**

You are working as a botanist in the quality control unit of a herbal company, manufacturing over-the-counter herbal tea bags for the following drugs.

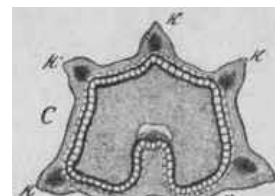


1-Identify the names of the three drugs. (1.5 marks, 0.5 mark each)

2-Identify the key elements from (1-6). (3 marks, 0.5 mark each)

3-The quality control unit rejects the patch of drug (A) due to adulteration. The following T.S. section was reported for the adulterant.

Suggest the name (0.5 mark) and main active constituents (1 mark) of the adulterant.



4- How can you confirm by a laboratory test the identity drug (B)? (1 mark)

5- Give a clue to destroy the pungency of (C). (1 mark)

6- Predict a common use of a tea bag congaing a mixture of the three drugs. (1 mark)

**Question V: Suggest the appropriate term (words) used to indicate each of the following: (5 marks, 0.5 mark each)**

1-A part of capsicum fruit responsible for its pungency

2-The type of senna fruits

3-The type of Colocynth fruits

4-A type of branching in which the main stem axis continues growing from the apical growing point while the lateral branches never exceed the length of the main axis.

5- Herbs that live one season and dies

6-The main active constituents of Aloe

7-A difference between the subterranean stem and the aerial stem

8-The main active constituents in wheat grains

9-It is an example of a hesperidium fruit

10- A herb used in the treatment of leukemia in children

**End of questions**