

[LB 4261]

AUGUST 2012

Sub. Code: 4261

THIRD YEAR B.PHARM. EXAM

Paper - I PHARMACOGNOSY AND PHYTOCHEMISTRY

Q.P. Code : 564261

Time: Three hours

Maximum: 100 Marks

(180 Min) Answer ALL questions in the same order.

I. Elaborate on:

Pages Time Marks  
(Max.)(Max.)(Max.)

- |   |    |    |    |
|---|----|----|----|
| 1. Write the pharmacognosy of the following drugs.<br>(a) Indian hemp (b) Benzion.  | 19 | 33 | 20 |
| 2. (a) Explain the preparation of starch from various sources.<br>(b) Write the biological source, preparation, chemical constituents, tests for identification and uses of tragacanth. | 19 | 33 | 20 |

II. Write notes on:

- |   |   |   |   |
|---|---|---|---|
| 1. Plant growth inhibitors.   | 3 | 8 | 5 |
| 2. Life cycle of ergot.   | 3 | 8 | 5 |
| 3. Adulterants of clove.  | 3 | 8 | 5 |
| 4. Detailed study of a drug containing C-glycoside.                                   | 3 | 8 | 5 |
| 5. Compare microscopical characters of coriander and fennel.                          | 3 | 8 | 5 |
| 6. Bees wax.  | 3 | 8 | 5 |
| 7. Write the source and uses for the following drugs.<br>(a) Arjuna (b) Shankapushpi. | 3 | 8 | 5 |
| 8. Hypoglycemic drug.   | 3 | 8 | 5 |

III. Short Answers:

- |  |   |   |   |
|--|---|---|---|
| 1. Identification tests for saponin glycosides.                      | 1 | 5 | 2 |
| 2. Source and uses of margosa oil.                                   | 1 | 5 | 2 |
| 3. Name of manipulated opium.  | 1 | 5 | 2 |
| 4. Identification test for tropane alkaloids.                        | 1 | 5 | 2 |
| 5. Source of a fixed oil containing vitamin A.                       | 1 | 5 | 2 |
| 6. What are stone cells? Name any two drugs containing stone cells.  | 1 | 5 | 2 |
| 7. Why cascara bark is to be stored for atleast one year before use? | 1 | 5 | 2 |
| 8. Define vein-islet number and vein termination number.             | 1 | 5 | 2 |
| 9. Murexide test.  | 1 | 5 | 2 |
| 10. Chemical constituents of silk.                                   | 1 | 5 | 2 |

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FEBRUARY 2013

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**Paper - I PHARMACOGNOSY AND PHYTOCHEMISTRY**

**Q.P. Code : 564261**

**Time: Three hours**

**Maximum: 100 Marks**

**(180 Min)**

**I. Elaborate on:**

**(2x20=40)**

- 1). Explain in detail the source, family, cultivation, collection, macroscopy, microscopy, chemical constituents, chemical tests, uses, substitutes, adulterants and storage of Digitalis leaves. (20 Marks)
- 2 a) Define evaluation. What are the different methods of evaluation of crude drugs? Explain about macroscopic evaluation of crude drugs in detail. (15 Marks)
- b) Write about biological evaluation with examples. (5 Marks)

**II. Short notes**

**(8 x 5 = 40)**

- 1) Give a note on chemotaxonomy and serotaxonomy.
- 2) General methods of pest control and examples of natural pesticides.
- 3) Life cycle of Ergot
- 4) Constituents of Opium
- 5) Differences between Indian Senna and Alexandrian Senna
- 6) Write about glyco-alkaloid containing drug
- 7) Gelatin sponge
- 8) Starch and its derived products

**III. Short answers**

**(10 x 2 = 20)**

- 1) What is vitreous Aloes and Hepatic Aloes?
- 2) Source, family, constituents and uses of Rauwolfia.
- 3) Keller-Kiliani test
- 4) Uses of Castor oil
- 5) Write the source for the four varieties of Aloes.
- 6) Give two chemical tests for identification of saponins.
- 7) Write two differences between Pale and Black Catechu.
- 8) Define Stomatal number and Stomatal Index.
- 9) What are cystoliths?
- 10) Give the chemical structure of Caffeine.

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(LD 4261)

AUGUST 2013

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**THIRD YEAR B.PHARM. EXAM**  
**PAPER I – PHARMACOGNOSY AND PHYTOCHEMISTRY**

*Q.P. Code: 564261*

**Time: Three Hours**

**Maximum: 100 marks**

**I. Elaborate on:**

**(2X20=40)**

1. Describe the microscopical characters, cultivation, collection, chemical tests, substitutes and adulterants of Cinchona.
2. Discuss the factors responsible for cultivation of medicinal plants with examples. Describe the Processing, storage and preservation of crude drugs.

**II. Write notes on:**

**(8X5=40)**

1. Sutures and Ligatures.
2. Differentiate Pale catechu and Black catechu.
3. Chemical tests for agar.
4. Explain pharmacological classification of crude drugs with suitable examples.
5. Discuss the different types of adulteration.
6. Allied drugs and substitutes used in clove.
7. Rice bran oil and eucalyptus oil.
8. Describe the natural colours used in pharmaceutical industry

**III. Short Answers on:**

**(10X2=20)**

1. Saffron
2. Bhilwa
3. Coleus
4. Cocoa
5. Brahmi
6. Oxidised cellulose
7. Amla
8. Keller-Kiliani test
9. Cardiac glycoside drug
10. Tobacco

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(LE 4261)

FEBRUARY 2014

Sub. Code: 4261

**THIRD YEAR B.PHARM. EXAM**

**PAPER I – PHARMACOGNOSY AND PHYTOCHEMISTRY**

*Q.P. Code: 564261*

**Time: Three Hours**

**Maximum: 100 marks**

**I. Elaborate on:**

**(2X20=40)**

1. How crude drugs are classified? Explain Pharmacological and chemical classifications with examples. Define chemotaxonomy and Serotaxonomy
2. a). Define 'Pharmacognosy'. Enumerate future scope of Pharmacognosy.  
b). List the crude drugs of marine origin. Explain the source, collection, preparation, constituents and uses of any one of them.

**II. Write notes on:**

**(8X5=40)**

1. How crude drugs are preserved? Give few examples
2. Name the factors influencing cultivation
3. Biological evaluation of crude drugs
4. How the adulterants of honey are detected?
5. A lipid from animal source
6. Name different varieties of aloes and their sources
7. Anti hypertensive drug of plant origin
8. Antihepatotoxic drugs

**III. Short Answers on:**

**(10X2=20)**

1. Source and use of Bentonite
2. Preparation and use of Gelatin sponge
3. Non-absorbable sutures
4. Biological source, constituents and uses of Amla
5. Define 'crude drugs' and 'Unorganised drugs'
6. What are adaptogens? How they work?
7. Classify fixed oils
8. Extraction of Medicinal castor oil
9. Sources of crude drugs used for steroidal synthesis
10. Source, constituents and uses of "Ma-Huang"

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(LF 4261)

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**THIRD YEAR B.PHARM. EXAM  
PAPER I – PHARMACOGNOSY AND PHYTOCHEMISTRY**

*Q.P. Code: 564261*

**Time: Three hours**

**Maximum: 100 marks**

**I. Essay:**

**(2X20=40)**

1. Describe the microscopical characters, cultivation, collection, chemical tests, substitutes and adulterants of Cinnamon.
2. Discuss different types of adulteration of crude drugs. How will you evaluate crude drugs by microscopical and physical methods with examples?

**II. Short notes:**

**(8X5=40)**

1. Define natural pesticide. Explain any two
2. Differentiate Tolu balsam and peru balsam
3. Explain chemical classification of crude drugs with suitable examples
4. Discuss the natural colours used in pharmacy
5. Manufacture of clove oil
6. Chemical test for acacia
7. Allied drugs and substitutes used in senna
8. Describe the cultivation and collection of opium

**III. Short answers:**

**(10X2=20)**

1. Chemical tests for saponins
2. Spirulina
3. Gelatin sponge
4. Two examples of plants with anti hepatotoxic drugs
5. Arjuna – Botanical source and uses
6. Two important diagnostic features of coriander
7. Chemical tests for cardiac glycosides
8. Goldbeater's skin test
9. Ligature
10. Coleus forskoli – common name and uses

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