

[KD 719]

Sub. Code : 4207

THIRD B.Pharmacy DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours Maximum : 90 marks
Two and a half hours Sec A & Sec. B : 60 marks
for Sec. A and Sec. B Section C : 30 marks

Answer Sections A and B in the same Answer Book.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. (a) Write a note on the incision of Poppy capsules. (4)
(b) How is Colophony prepared? In what way does it differ from that of Benzoin? (4 + 1 = 5)
(c) Describe the life cycle of Ergot with the help of a neat labelled diagram. (6)

2. (a) Write a note on the adulterants of Clove. What are the means to find them out. (4)

(b) Write a note on the adulterants of Ginger and the ways to detect them. (4)

(c) Discuss the chemistry of Digitalis purpurea and D. lanata and bring out precisely the inter-relationship of their constituents. (7)

3. (a) Compare the transverse sections of Cinnamon and Cinchona and bring out all the possible differences. Draw neat labelled diagrams of both the drugs. (6)

(b) Write a note on the collection of the following : (3 + 3 = 6)

(i) Clove and

(ii) Cardamom.

(c) Write a note on the preparation of Castor oil. (3)

SECTION B — (12 × 2.5 = 30 marks)

Answer any TWELVE of the following.

4. What is Combined Umbelliferone test? What is its significance?
5. Give the biological source of the following :
 - (a) Saffron
 - (b) Pyrethrum.

APRIL - 2001

6. Give the biological source and one important use of the following :

- (a) Conessine
- (b) Anethole.

7. What are Barbaloin and Isobarbaloin? What is the significance of Isobarbaloin?

8. Give the official source of *Cascara sagrada*. Give reason as to why the drug has to be stored atleast for one year before it is put to medicinal use.

9. Explain as to why :

- (a) No pressure is to be applied while the aloetic juice is flowing
- (b) Solanaceous drugs are to be dried in shade between 40 to 50°C?

10. Give reasons why

- (a) *Digitalis* is to be dried below 60°C immediately after collection?
- (b) Rapid drying of *Cardamom* is to be avoided?

11. What is the significance of *vittae* in Umbelliferous drugs?

12. Bring out the morphological differences between the Rio and Cartagena variety of *Ipecac*.

13. Describe how Cape aloes is produced.

14. Give the exact location of the following constituents in the respective drugs :

- (a) Strychnine
- (b) Eugenol
- (c) Reserpine
- (d) Glycyrrhizin
- (e) Palmosides.

15. Describe the morphology of *Coriander*.

16. Write a note on *Woolfat*.

17. Give one important use of the following :

- (a) *Chaulmoogra* oil
- (b) *Ispaghula*
- (c) *Rhubarb*
- (d) *Ergometrine*
- (e) *Tetrahydrocannabinol*.

18. Source and important differences between *Sumatra* and *Siam Benzoin*.

NOVEMBER - 2001

[KE 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-revised Regulations)

**Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY**

Time : Three hours

Maximum : 90 marks

Two and a half hours

Sec. A & Sec. B : 60 marks

for Sec. A and Sec. B

Section C : 30 marks

Answer Sections A and B in the same answer book.

Answer Section C in the answer sheet provided.

SECTION A — (3 × 10 = 30 marks)

Answer any **THREE** questions only.

1. (a) Describe the cultivation and collection of cinnamon bark.
(b) Write a note on umbelliferous fruits. (4 + 6)
2. (a) Write the chemical constituents, tests and uses of cinchona.
(b) Describe the macroscopy and microscopy of senna with a note on its adulterants. (4 + 6)

3. (a) Write a note on cardiac glycosides.
(b) Briefly explain the preparation of aloes. (6 + 4)
4. (a) Write a note on tropane alkaloidal drugs.
(b) Briefly describe the pharmacognosy of cantharides and cochineal. (6 + 4)

SECTION B — (6 × 5 = 30 marks)

Write short notes on any **SIX**.

5. Present status and future of pharmacognosy.
6. Evaluation of natural products.
7. Indigenous systems of medicine.
8. Pharmacognosy of flower drugs.
9. Powders of natural occurrence used in pharmacy.
10. General principles of cultivation of medicinal plants.
11. Vegetable fibres.
12. Crude drugs of mineral origin.

MARCH - 2002

[KG 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re- Revised Regulations)

**Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY**

Time : Three hours
Two and a half hours
for Sec. A & Sec. B

Maximum : 90 marks
Sec. A & Sec. B : 60 marks
Section C : 30 marks

Answer Sections A and B in same Answer Books.

Answer Section C in the Answer Sheet provided.

SECTION A — (3 × 10 = 30 marks)

Answer any THREE questions.

1. Discuss in detail various methods of drug evaluation. (10)
2. Comment on various factors causing Drug deterioration. Highlight the features of proper storage. (10)
3. Covering the historical background discuss the future scope of Pharmacognosy. (10)
4. (a) Mention the source of honey. (2)
(b) Discuss the preparation of honey. (4)
(c) Highlight the various parameters for detection of pure honey. (4)

SECTION B — (6 × 5 = 30 marks)

Answer any SIX of the following.

5. Highlight the importance of edaphic factors in the cultivation of medicinal plants. (5)
6. Give a note on 'desirable and undesirable changes' that take place in crude drugs after collection. (5)
7. Define a 'Pure Crude Drug : what are the various types of impurities found in the crude drugs? (5)
8. Give a systematic procedure adopted for identification of powdered drugs. (5)
9. Give an account of commercial fibres used in pharmacy. (5)
10. Write a note on Bentonite. (5)
11. Give the source, chemical constituents and uses of : (5)
 - (a) Turpentine oil
 - (b) Wool fat
 - (c) Spermaceti
 - (d) Kurchi
 - (e) Nutmeg.
12. Write a note on indeliberate adulteration. (5)

SEPTEMBER - 2002

[KH 719]

Sub. Code : 4207

THIRD B.Pharmacy DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours Maximum : 90 marks
Two and a half hours Sec. A & Sec. B : 60 marks
for Sec. A and Sec. B Section C : 30 marks

Answer Sections A and B in the same Answer Book.

Answer Section C in the Answer Sheet provided.

SECTION A — (3 × 10 = 30 marks)

Answer any THREE questions.

1. (a) Describe the cultivation and collection of senna leaves.
(b) Describe the cultivation, collection and processing of cinchona bark. (5 + 5)
2. (a) Write note on the storage methods of crude drugs with examples.
(b) Write in brief the pharmacognosy of Nux-vomica. (5 + 5)

3. (a) Write the preparation of virgin olive oil along with its chemical composition and uses.

(b) Give the adulterants and substituents and their identification in Aloes and cloves. (5 + 5)

4. (a) Give the source collection, preparation, constituents and uses of Benzoin.

(b) Write a note on strophanthus. (5 + 5)

SECTION B — (6 × 5 = 30 marks)

Write short notes on any SIX.

5. Chemical evaluation of natural products.
6. Hybridization in plant drugs.
7. Pharmacognosy of Bentonite.
8. Natural powders and their use in pharmacognosy.
9. Extraction of volatile oils.
10. Lycopodium spore method of evaluation.

SEPTEMBER - 2002

11. Factors influencing the cultivation of medicinal plants.

12. Scope of pharmacognosy.

APRIL - 2003

[KI 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re Revised Regulation)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours

Maximum : 90 marks

Two and a half hours

Sec. A & Sec. B : 60 marks

for Sec. A and Sec. B

Section C : 30 marks

Half an hour : Section C

Answer Sections A and B in **SAME** Answer book.

Answer Section C in the answer sheet provided.

SECTION A — (3 × 10 = 30 marks)

Answer any **THREE** questions.

1. (a) Describe the cultivation and collection of Digitalis leaves.

(b) Write notes on Biological methods of evaluation. (5 + 5)

2. (a) Write the chemical constituents, tests and uses of cinchona bark.

(b) Describe the macroscopy, microscopy, adulterants of cloves. (5 + 5)

3. (a) Write a note on alkaloids.

(b) Explain the preparation of gelatin. (5 + 5)

4. (a) Explain various methods of adulteration of crude drugs with examples.

(b) Give the adulterants and their detection in Honey. (6 + 4)

SECTION B — (6 × 5 = 30 marks)

Write notes on any **SIX**.

5. Physical methods of evaluation of crude drugs.

6. Umbelliferous fruits.

7. Preparation of cotton and silk.

8. Mineral drugs and their use in pharmacy.

9. Pharmacognosy of Cascara Sagrada.

10. Future scope of pharmacognosy.

11. Mutation and Polyploidy.

12. Adulterants of olive oil and Aloe and their detection.

OCTOBER - 2003

[KJ 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re Revised Regulation)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours

Maximum : 90 marks

Two hours and forty minutes Sec. A & Sec. B : 70 marks
for Sec. A and Sec. B

Section C : 20 marks

Twenty minutes : Section C

Answer Sections A and B in **SAME** Answer Books.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any **TWO** of the following :

1. (a) How clove oil is isolated from its source? (8)
(b) Describe the macroscopy, active constituents, adulterants and uses of clove. (2 + 2 + 2 + 1 = 7)
2. Discuss the cultivation, collection and preparation for the market of (a) Digitalis (b) Rauwolfia. (7.5 + 7.5 = 15)
3. Write an essay on Animal and Plant fibres. (15)

SECTION B — (8 × 5 = 40 marks)

Answer any **EIGHT** of the following :

4. Preparation of Indian opium for the market.
5. Therapeutic actions of Indole alkaloids.
6. Life cycle of Ergot.
7. Macroscopy and microscopy of Fennel.
8. Basic principles of Ayurvedic system of Medicine.
9. Cardenolides and Buffadenolides.
10. Storage of crude drugs.
11. Use of Lycopodium in Quantitative Microscopy.
12. Identification of Cinnamon in powdered condition.
13. Scope of Pharmacognosy.

APRIL - 2004

[KK 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-Revised Regulation)

**Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY**

Time : Three hours

Maximum : 90 marks

Sec. A & B : Two hours and

forty minutes

Sec. A & B : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer Sections A and B in the **SAME** Answer Book.

SECTION A — (2 × 15 = 30 marks)

Answer any **TWO** of the following.

1. (a) Write the cultivation, collection and preparation for the market of Cinnamon.

(b) Give the Diagnostic macroscopical and microscopical characters of Nux Vomica with the help of neat, labelled diagrams.

2. What are the factors affecting crude drugs during storage, bringing about their deterioration? What are the measures to prevent or minimise deterioration?

3. Write the sources, macroscopical characters, constituents and allied drugs of any three indigenous drugs acting on gastro intestinal system.

SECTION B — (8 × 5 = 40 marks)

Answer any **EIGHT** of the following.

4. Constituents and uses of Liquorice.

5. Chemical tests for :

(a) Asafoetida.

(b) Starch.

6. Preparation and constituents of gelatin.

7. Write a short note on balsams you have studied.

8. Tropane alkaloid containing drugs (any two). Give their sources, macroscopical characters and uses.

9. Give sources, constituents and uses of any two flower drugs.

APRIL - 2004

10. Preparation of absorbant cotton.
 11. Differences between pale catechu and black catechu.
 12. Sources, constituents and uses of any two drugs of mineral origin.
 13. Quantitative microscopy.
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AUGUST - 2004

[KL 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re- Revised Regulations)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours

Maximum : 90 marks

Sec. A & B : Two hours and
forty minutes

Sec. A & B : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer Sections A and B in the SAME Answer Book.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. Describe quantitative microscopy as an important drug evaluation tool for identification and detection of adulteration.

2. (a) Discuss the merits and demerits of collection of crude drugs from wild and cultivated sources.

(b) Write short notes on commercial fibers used in pharmacy.

3. (a) Describe the macroscopy of fennel.

(b) Give the uses of Liquorice.

(c) Write a note on the diagnostic microscopical characters of Senna. (5 + 5 + 5)

SECTION B — (8 × 5 = 40 marks)

Answer any EIGHT of the following.

4. Write a brief note on crude drugs of mineral origin.

5. Discuss the chemical constituents of any two unorganised drugs related to carbohydrates and also give a brief sketch on their chemical tests.

6. How is clove collected, what are its adulterants, how are they detected?

7. Write the chemical structure of

(a) Strophanthidin

(b) Sennoside A

(c) Atropine

(d) Barbaloin

(e) Eugenol.

8. Write a note on powders of a natural occurrence.

9. Write a note on Bentonite.

10. Briefly describe the use of crude drugs in the indigenous systems of medicine.

AUGUST - 2004

- 11. How do you predict the future scope of pharmacognosy?**
 - 12. Explain with suitable examples how crude drugs are prepared for the market.**
 - 13. Write a note on indeliberate adulteration.**
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FEBRUARY - 2005

[KM 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

**Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY**

Time : Three hours Maximum : 90 marks

Sec.A & B : Two hours and Sec.A & B : 70 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

SECTION A — (2 × 15 = 30 marks)

Answer any TWO question only.

1. (a) Give an account of cultivation, collection and processing of cardamom.

(b) State biological source, chemical constituents, tests for identification and uses of Digitalis. (6 + 9)

2. (a) Describe the macroscopy and microscopy of Rauwolfia.

(b) Discuss the adulterants of clove and a chemical test for identification of authentic clove oil. (6 + 9)

3. (a) Describe the method of preparation of various types of Aloes for the market.

(b) Give biological source, chemical nature, a test for identification and uses of morphine. (9 + 6)

SECTION B — (8 × 5 = 40 marks)

Shorts notes on any EIGHT.

4. Describe any one dried aqueous extract under a suitable pharmacognostic scheme.

5. Write a note on waxes obtained from animal sources.

6. Bentonite.

7. Vegetable fibers used in pharmacy.

8. Quantitative microscopy.

9. Drying of crude drugs.

10. Methods of cultivation of medicinal and aromatic plants.

11. Physical evaluation of crude drugs.

12. Oleo - resinous drugs of pharmaceutical importance.

13. Prevention of deterioration of crude drugs.

AUGUST - 2005

[KN 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours

Maximum : 90 marks

Theory : Two hours and
forty minutes

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay : (2 × 15 = 30)

Answer any TWO questions only.

1. (a) Give an account of cultivation, collection and processing of Senna.

(b) Discuss the adulterants and substitutes (if any) of Cinnamon and a test for differentiation Cinnamon oil and Cassia oil. (6 + 9)

2. (a) Describe the macroscopy and microscopy of Ephedra.

(b) State biological source, chemical constituents, tests for identification and uses of Ipecac. (6 + 9)

3. (a) Discuss the method of preparation of Starch from different sources.

(b) Write a note on balsamic resinous drugs. (9 + 6)

II. Write short notes on any EIGHT: (8 × 5 = 40)

1. Definition and scope of pharmacognosy.

2. Collection of crude drugs.

3. Storage of crude drugs.

4. Microscopic evaluation of crude drugs.

5. Chemical evaluation of crude drugs.

6. Honey.

7. Animal fibres used in Pharmacy.

8. Kamala.

9. Describe the pharmacognosy of a wax obtained from marine source.

10. Give biological source, chemical nature, a test for identification and uses of caffeine.

FEBRUARY - 2006

[KO 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours

Maximum : 90 marks

Theory : Two hours and
forty minutes

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay : (2 × 15 = 30)

Answer any TWO questions only.

1. (a) Describe the macroscopy and microscopy of clove with neat and labelled diagrams. (10)
(b) Describe the preparation of clove oil. (5)
2. (a) Write the source, macroscopical characters, identification tests and clinical uses of a drug containing steroidal glycosides. (10)
(b) Write a note on the preparation of aloes. (5)

3. (a) What is manipulated opium? Describe the collection of opium in India. Write its constituents and uses. (10)

(b) Write a note on the adulteration of honey and olive oil. (5)

4. (a) How gelatin is manufactured from its source? Write the chemical tests and uses. (10)

(b) Write the difference between fixed oils and volatile oils. (5)

II. Short notes : (8 × 5 = 40)

Write short notes on any EIGHT only.

1. Advantages of collecting drugs from cultivated sources.
2. Prevention of drugs deterioration.
3. Lycopodium spore method of drug evaluation.
4. Pharmacognosy of Rauwolfia.
5. General characters of umbelliferous fruits.
6. Preparation of medicinal castor oil.
7. Trichomes as a diagnostic character.
8. Powders of mineral origin as pharmaceutical aids.
9. Scope of pharmacognosy.
10. Storage of crude drugs.

AUGUST - 2006

[KP 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

**Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY**

Time : Three hours Maximum : 90 marks

**Theory : Two hours and
forty minutes Theory : 70 marks**

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

I. Long Essay : (2 × 20 = 40)

Answer any TWO questions.

- 1. Describe the sources, characters, constituents and uses of commercial fibers used in pharmacy.**
- 2. Explain in detail the methods of drug evaluation and standardisation.**
- 3. Write a pharmacognostic note on any three fruit drugs you have studied.**
- 4. Explain the sources, cultivation and collection, diagnostic characters, constituents and substitutes and adulterants of cinchona and senna.**

II. Short notes : (6 × 5 = 30)

Answer any SIX questions.

- 1. Honey.**
- 2. Write a detailed note on the storage of crude drugs.**
- 3. Describe the present status and future scope of pharmacognosy.**
- 4. Acacia.**
- 5. Rhubarb.**
- 6. Cochineal.**
- 7. Lycopodium.**
- 8. Kaolin.**

FEBRUARY - 2007

[KQ 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours

Maximum : 90 marks

Theory : Two hours and
forty minutes

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay :

(2 × 20 = 40)

Write any TWO

1. What are the factors affecting the cultivation of vegetable drugs? What are the various parameters to be considered for the collection of vegetable drugs from wild as well as cultivated plants?

2. Define evaluation of a crude drug. What are the different methods of evaluation? Explain in detail with suitable examples, with diagrams the organoleptic and morphological evaluation of a crude drug.

3. What are the leaf constants studied by quantitative microscopic method. Explain how do you determine the palisade ratio of a leaf with neat diagrams.

4. Name the fibres used in pharmacy. Give the source, method of manufacture, chemical constituents and chemical tests for cotten.

II. Short notes :

(6 × 5 = 30)

Write any SIX questions.

1. Storage of crude drugs.
2. Adulterants of clove
3. Chemical Evaluation of a crude drug
4. Preparation of maize starch
5. Solanaceous drugs
6. Regenerated cellulose
7. Macroscopy and microscopy of Nux - vomica.
8. History of pharmacognosy.

[KR 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours

Maximum : 90 marks

Theory : Two hours and
forty minutes

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay : (2 × 15 = 30)

Answer any TWO questions.

1. (a) Explain giving neat labelled diagrams the morphology and microscopy of Rauwolfia serpentine.

(b) State the biological sources, chemical constituents and the various chemical tests to distinguish between Pale and Black atechu.

2. (a) Give the significance of cultivation of plant drugs with examples. Classify the methods of cultivation.

(b) List down the factors causing deterioration of crude drugs. What measures can be taken to prevent them.

3. (a) Describe the life cycle of ergot. Mention its chemical constituents, uses and chemical tests.

(b) Give a pharmacognostic account of any one plant drug containing anthracene glycosides.

II. Write short notes on any EIGHT : (8 × 5 = 40)

1. Stomatal number and stomatal index.

2. Chemical constituents and uses of opium alkaloids.

3. Silk.

4. Asafoetida.

5. Varieties of Aloes.

6. Colophony.

7. Cultivation and collection of clove buds.

8. Chemical constituents and uses of cannabis.

9. Bentonite.

10. Pharmacognosy of Beeswax.

[KR 745]

Sub. Code : 4236

THIRD B.Pharm. DEGREE EXAMINATION.

(2004 onwards)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Time : Three hours

Maximum : 90 marks

Theory : Two hours and
forty minutes

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Essay questions. (2 × 15 = 30)

Answer any TWO questions only.

1. (a) Give an account of cultivation, collection and processing for the market of senna.

(b) Describe the macroscopy, microscopy, chemical constituents and uses of nux vomica. (7 + 8)

2. (a) Describe the life cycle of ergot. Give an account of its active constituents and therapeutic uses.

(b) How medicinal castor oil is prepared from its source? How will you identify its purity? (8 + 7)

3. (a) What is standardization? Give an account of various factors with suitable examples which affects standardization of plant drugs.

(b) Give a brief account on the historical background, present status and future scope of pharmacognosy. (7 + 8)

II. Short notes on any EIGHT only. (8 × 5 = 40)

1. Storage conditions for plant drugs.
2. Powder microscopy of cinchona
3. An account on powders of natural occurrence
4. Chemical evaluation of crude drugs.
5. Significance of quantitative microscopy in the evaluation of plant drugs
6. Adulterants of honey and their detection
7. Pharmaceutical importance of talc
8. Preparation of a balsamic resin
9. An account of a root containing indole alkaloid
10. Ayurvedic system of medicine.

[KS 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Q.P. Code : 564207

Time : Three hours

Maximum : 90 marks

Theory : Two hours and
forty minutes

Theory : 70 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

I. Long Essay : (2 × 15 = 30)

Answer any TWO questions.

1. (a) Give an account of the scope of Pharmacognosy.

(b) State the biological source, chemical constituents tests for identification and uses of Digitalis leaf. (6 + 9)

2. (a) Discuss the deterioration and prevention of crude drugs.

(b) State the biological source chemical constituents, tests for identification and uses of Ergot. (6 + 9)

3. (a) Describe the macroscopy and microscopy of cinnamon bark.

(b) Give the source, macroscopical characters, constituents, substitutes and adulterants of Rhubarb. (6 + 9)

4. Write a detailed note on identification and detection of adulteration.

II. Write short notes on any EIGHT : (8 × 5 = 40)

1. Scope of Pharmacognosy.

2. Animal fibres used in pharmacy.

3. Highlight the Ayurvedic and unnani systems of medicine.

4. Microscopic evaluation of crude drugs.

5. Aloes.

6. Honey.

7. Cardamom.

8. Terpenoids.

9. Indian gum.

10. Indian Senna.

February-2008

[KS 745]

Sub. Code : 4236

THIRD B.Pharm. DEGREE EXAMINATION.

(2004 onwards)

Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY

Q.P. Code : 564236

Time : Three hours Maximum : 90 marks

Theory : Two hours and Theory : 70 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

I. Essay questions : (2 × 15 = 30)

Answer any TWO questions only.

1. Briefly discuss various systems of classification of crude drugs from natural origin with examples. (15)

2. (a) Give the source, cultivation, macroscopy, microscopy constituents and uses of Liquorice.

(b) Explain the following :

(i) Murexide test

(ii) Vitalis test

(iii) Thalloquine test. (9 + 6)

3. (a) How gelatin is manufactured from its source? Write the chemical test and uses.

(b) Explain borntrager's and modified borntrager's test with examples. (9 + 6)

4. (a) Describe the method of preparation of various types of Aloes for the market.

(b) Write a note on balsamic resinous drugs. (9 + 6)

II. Short notes on any EIGHT only. (8 × 5 = 40)

1. Definition and scope of Pharmacognosy.

2. Factors influencing cultivation of medicinal plants.

3. Detection of adultrants in crude drugs.

4. Application of plant growth regulators.

5. Animal fibres used in Pharmacy.

6. Kaolin.

7. Honey.

8. Write the source, preparation and uses of cod liver oil.

9. Macroscopy and microscopy of Ephedra.

10. Briefly describe the use of crude drugs in the traditional system of medicine.

[KT 719]

Sub. Code : 4207

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised/Re-Revised Regulations)

**Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY**

Q.P. Code : 564207

Time : Three hours

Maximum : 90 marks

I. Long Essay : (2 × 20 = 40)

Answer any TWO.

1. Discuss the quantitative microscopy and its application for identification and detection of adulterants in crude drugs. (20)

2. Describe the Pharmacognosy of

(a) Clove

(b) Liquorice. (10 + 10)

3. Give the source, cultivation, collection, processing, chemical constituents, identification test and uses of opium. (20)

II. Short Notes :

(8 × 5 = 40)

Answer any EIGHT.

1. Scope of Pharmacognosy
2. Drug improvement
3. Saffron
4. Vinca
5. Asafoetida
6. Spermaceae
7. Powders of Natural occurrence
8. Crude drugs from mineral origin
9. Fibres used in pharmacy
10. Stomata

4. Source and uses of cannabis

5. Identification test for colophony

6. Name the plants containing steroidal alkaloid and steroidal saponin.

7. Specify the type of calcium oxalate crystals in Belladonna and Squill.

III. Short Answer :

(5 × 2 = 10)

Answer any FIVE.

1. Thaloquin test
2. Chemical structure and uses of Digoxin
3. Chemical test for Ergot

August 2008

[KT 745]

Sub. Code : 4236

THIRD B.Pharm. DEGREE EXAMINATION.

(2004 onwards)

**Paper I — PHARMACOGNOSY AND
PHYTOCHEMISTRY**

Q.P. Code : 564236

Time : Three hours

Maximum : 90 marks

I. Essay questions : (2 × 20 = 40)

Answer any TWO questions only.

1. (a) **Classify the drugs of natural origin based on their pharmacological actions.**

(b) **What are glycosides? Broadly classify them chemically with suitable examples.**

(c) **Write a note on Serotaxonomy. (10 + 6 + 4)**

2. (a) **Discuss the different methods of cultivation used for propagating medicinal plants.**

(b) **What are plant hormones? Give their application.**

(c) **Write a note on Pest control. (10 + 6 + 4)**

August 2008

3. (a) What is adulteration? How will you detect the adulteration in crude drugs?

(b) Give the sources, chemical constituents and uses for the following :

- (i) Shatavari
- (ii) Guggul
- (iii) Punarnave
- (iv) Gymnema
- (v) Shankupuspi. (10 + 10)

II. Short notes on any EIGHT only : (8 × 5 = 40)

- 1. Methods of adulteration of crude drugs.
- 2. Scope and development of Pharmacognosy.
- 3. Chemical tests for Acacia.
- 4. Macroscopy and Microscopy of Cinchona.
- 5. Plant fibres in Pharmacy.
- 6. Natural Pesticides.
- 7. Hepatoprotective drug.

8. Cultivation and collection of Cardamom.

9. Amla

10. Any one Anthraquinone Cathartic.

III. Short answers on any FIVE only : (5 × 2 = 10)

- 1. What is cruciferous stomata? Give an example.
- 2. Give the source and uses of Mel.
- 3. What is Klunge's isobarbalion test?
- 4. What are Benz Pyrrole alkaloids? Give two examples.
- 5. What is china clay? and give its uses.
- 6. What is stas - otto process?
- 7. Write the different forms of Opium.

February 2009

[KU 719]

Sub. Code: 4207

THIRD B.PHARM. DEGREE EXAMINATION
(Re-Revised Regulations)
Candidates Admitted upto 2003-04
Paper I – PHARMACOGNOSY AND PHYTOCHEMISTRY
Q.P. Code : 564207

Time : Three hours

Maximum : 90 marks

I. Essay Questions : Answer any TWO questions (2 x 20 = 40)

1. a) Write source, cultivation, collection, macroscopy and chemical constituents of digitalis. (12)
b) Polyploidy and Hybridization. (8)
2. a) What are evaluation methods? Explain physical evaluation method. (12)
b) What is Benzoin? How to distinguish chemically the two types of benzoin you have studied? (8)
3. What are Indole alkaloidal drugs? Discuss the any two of them you have studied? (20)

II. Write Short Notes : Answer any EIGHT questions (8 x 5 = 40)

1. Quantitative microscopic evaluation of crude drugs.
2. Give an account of cultivation and collection of clove.
3. Give the sources, constituents and uses of Ipecac.
4. Macroscopy and microscopy of cinchona.
5. Write source, preparation and uses of medicinal castor oil.
6. Bentonite.
7. Kurchi.
8. Opium.
9. Advantage and disadvantage of wild and cultivated sources.
10. Definition and History of pharmacognosy.

III. Short Answers: Answer any FIVE questions (5 x 2 = 10)

1. Define stomata and types of stomata.
2. Constituents of pyrethrum.
3. Source and uses of caraway.
4. Identification test for cotton.
5. Name different types of starch with diagram.
6. Constituents of saffron.
7. Source and macroscopy of cardamom.

August 2009

[KV 719]

Sub. Code: 4207

THIRD B.PHARM. DEGREE EXAMINATION
(Re-Revised Regulations)
Candidates Admitted upto 2003-04
Paper I – PHARMACOGNOSY AND PHYTOCHEMISTRY
Q.P. Code : 564207

Time : Three hours

Maximum : 90 marks

I. Essay Questions : Answer any TWO questions (2 x 20 = 40)

1. Describe in detail the macroscopy and microscopy and write the source, family, constituents test for identification and uses of cinchona.
2. **a)** Define and classify adulteration.
b) How will you evaluate crude drugs by physical method?
3. **a)** How will you isolate clove oil from its source.
b) Write the source, constituents, preparation and uses of cod liver oil.

II. Write Short Notes : Answer any EIGHT questions (8 x 5 = 40)

1. Scope of pharmacognosy.
2. Write short notes on plant hormones.
3. Powder microscopy.
4. Fox glove.
5. Benzoin.
6. Acacia.
7. Nux vomica.
8. Datura.
9. Aloes.
10. Fibres used in pharmacy.

III. Short Answers: Answer any FIVE questions (5 x 2 = 10)

1. Define and classify extractive value.
2. Test for cotton.
3. Tests for cardiac glycoside.
4. Types of Trichomes.
5. Write source, constituents and uses of amla.
6. Write constituents and uses of aswagandha.
7. Write the source, family and constituents of ergot.

February 2010

[KW 719]

Sub. Code: 4207

THIRD B.PHARM. DEGREE EXAMINATION
(ReRevised Regulations)
Candidates Admitted upto 2003-04
Paper I – PHARMACOGNOSY AND PHYTOCHEMISTRY
Q.P. Code : 564207

Time : Three hours

Maximum : 90 marks

I. Essay Questions : Answer any TWO questions (2 x 20 = 40)

1. Briefly discuss the source, family, chemical, constituents, method of collection, test for identification and uses of digitalis.
2. **a)** Give an account of the scope of pharmacognosy.
b) Discuss various system of classification of crude drugs from natural origin with examples.
3. Describe in detail life cycle of Ergot.

II. Write Short Notes : Answer any EIGHT questions (8x 5 = 25)

1. Write short notes on plant fibres.
2. Quantitative microscopy.
3. Merits and demerits of cultivation of medicinal plants.
4. Opium.
5. Senna.
6. Agar.
7. Fennel.
8. Aswagandha.
9. Ephedra.
10. Vinca.

III. Short Answers: Answer any FIVE questions (5x 2 = 10)

1. Test for anthroquinone glycoside.
2. Thallioquin test.
3. Difference between volatile oil and fixed oil.
4. Test for honey.
5. Stomata.
6. Define and classify ash valves.
7. Gymnema.

September 2010

[KX 719]

Sub. Code: 4207

THIRD B.PHARM. DEGREE EXAMINATION

(Re-Revised Regulations) Candidates Admitted upto 2003-04
Paper I – PHARMACOGNOSY AND PHYTOCHEMISTRY

Q.P. Code : 564207

Time : Three hours

Maximum : 90 marks

I. Essay Questions :

(2 X 20 = 40)

Answer any TWO questions.

1. Define Evaluation. What are the five types of evaluation? Explain about Microscopical Evaluation in detail.
2. What are cardiotoxic drugs? Classify them based on lactone ring? Discuss the pharmacognosy of digitalis.
3. What are Fibres? Outline the general chemical test for fibres. Classify the fibres and write about any one Plant fibre and Animal fibre in detail.

II. Write Short Notes :

(8X 5 = 40)

Answer any EIGHT questions.

1. Differentiate Indian Senna & Alexandrian Senna
2. Adulterants of clove
3. Honey
4. Gambier
5. Kurchi
6. Kaolin
7. Lycopodium spore Method
8. Different Methods used for adulteration
9. Present status and future scope of pharmacognosy
10. Ayurveda system of medicine

III. Short Answers:

(5X2 = 10)

Answer any FIVE questions.

1. Write any two differences between Cinnamon zeylanicum and Cinnamon cassia.
2. What are the precautions to be taken during the collection of opium?
3. Give the four types of stomata with examples.
4. How to differentiate Silk fibre from Wool.
5. What is the difference between Green tea and Black tea?
6. Write the source, family, constituents and uses of Nux-vomica.
7. Give two reasons for using Lycopodium as a standard in Lycopodium Spore Method.

FEBRUARY 2011

[KY 719]

Sub. Code: 4207

THIRD B.PHARM. DEGREE EXAMINATION

(Re-Revised Regulations) Candidates Admitted upto 2003-04

Paper I – PHARMACOGNOSY AND PHYTOCHEMISTRY

Q.P. Code : 564207

Time : Three hours

Maximum : 90 marks

I. Essay Questions : Answer any TWO questions.

(2 x 20 = 40)

1. Describe the Pharmacognosy of Opium.
2. Describe the factors influencing the deterioration of crude drugs. How will you prevent deterioration and storage of crude drugs.
3. Explain different methods of Drug improvements.

II. Write Short Notes : Answer any EIGHT questions.

(8 x 5 = 40)

1. What are the difference between fixed oils and volatile oils.
2. Physical evaluation.
3. Vinca.
4. Capsicum.
5. Ephedra.
6. Nut Meg.
7. Cotton.
8. Chemical tests for Benzoin.
9. Kieselgur.
10. Tea.

III. Short Answers: Answer any FIVE questions.

(5 x 2 = 10)

1. Write source for Balsam of tolu and Balsam of Peru.
2. Identification test for cinchona.
3. Constituents for Asafoetida.
4. Microscopical characters of Nux vomica.
5. Macroscopy of Coriander.
6. Evaluation methods.
7. Write source and uses of Kurchi.
