Printed Pages: 01 **Sub Code: BP-501T**

Paper Id: 231121 **Roll No.** | | | | | | | | | | |

B PHARM
(SEM V) THEORY EXAMINATION 2022-23
MEDICINAL CHEMISTRY-II

Time: 3 Hours ***Total Marks: 75***

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

(a) Give the synthesis of Cimetidine.
(b) State the mechanism of action and uses of Methotrexate.
(c) What are anti-anginal drugs? Outline the structure of Nitroglycerin.
(d) Give the synthesis and uses of Furosemide.
(e) Name and give structures of any two drugs used in Congestive Heart Failure.
(f) State the importance of anticoagulants.
(g) Write the structure and uses of Testosterone.
(h) Discuss mechanism of action and uses of Sildenafil.
(i) Outline the synthesis of benzocaine.
(j) State the mechanism of action and uses of metformin.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

(a) Classify anti-neoplastic agents in detail. Give the synthesis of Mechlorethamine.

(b) Discuss SAR of local anaesthetics.

(c) What are antihypertensive agents? Classify them and give mode of action and uses of methyldopate hydrochloride.

SECTION C

3. Attempt any *five* parts of the following: **5 x 7 = 35**

(a) Discuss SAR of Thiazide Diuretics. Outline the synthesis of Chlorthiazide.

(b) Detail about histamine receptors and their distribution in human body. Detail about H2-antagonists.

(c) Illustrate the classification of antihyperlipidemic agents and discuss mechanism of action of HMG-CoA reductase inhibitors.

(d) Discuss nomenclature and stereochemistry of steroids.

(e) Classify antidiabetic agents. Discuss SAR of Sulfonylureas and give synthesis of Tolbutamide.

(f) Discuss mode of action and synthesis of any two: (i) Disopyramide phosphate (ii) Warfarin (iii) Dibucaine

(g) Discuss in detail classification of antithyroid drugs.

Subject Code: BP501T

PAPER ID-410347

Roll No: | | | | | | | | | | | | | |

B. PHARM
(SEM V) THEORY EXAMINATION 2021-22
MEDICINAL CHEMISTRY-II

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a.	Draw any two structures of antimetabolites used as antineoplastic agents.
b.	Write synthesis of isosorbide dinitrate.
c.	What are oral contraceptives. Give examples.
d.	Discuss the mechanism of action and uses of acetazolamide.
e.	Give structure and mechanism of action of any one antihyperlipidemic agent.
f.	Describe calcium channel blockers along with their uses.
g.	Discuss the role of digoxin in treatment of congestive heart failure.
h.	Define oral anticoagulants with examples.
i.	Give the synthesis of benzocaine.
j.	Write down the structure, mechanism of action and uses of rabeprazole.

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a.	Classify diuretics. Explain SAR of thiazides diuretics along with synthesis of chlorothiazide.
b.	Define and classify antihistaminic agents. Explain in detail about structures and uses of first generation H1 antihistaminic agents.
c.	What are antidiabetic agents. Classify oral hypoglycemic agents and describe in detail about SAR and mechanism of action of sulfonylureas along with synthesis of tolbutamide.

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

a.	Classify local anesthetics with examples and explain in detail about various benzoic acid derivatives.
b.	Describe antihypertensive drugs. Explain in detail about structures and mechanism of action of angiotensin converting enzyme inhibitors.
c.	Classify antineoplastic agents. Discuss in detail about structure and mechanism of action of alkylating agents.
d.	Explain thyroid and antithyroid drugs with structures and uses.
e.	Give classification of antianginal drugs. Discuss in detail structure, mechanism of action and uses of nitrates.
f.	Discuss in detail about different corticosteroids. Give structures of cortisone and prednisolone.
g.	Classify antiarrhythmic drugs. Describe in detail about structures and mechanism of action of drugs belonging to class I.

PAPER ID: 310097

Subject Code: BP501T

Roll No: | | | | | | | | | | |

B PHARM
(SEM-V) THEORY EXAMINATION 2020-21
MEDICINAL CHEMISTRY-II

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	Define antihistaminic agents with suitable examples.
b.	Draw chemical structure of rabeprazole.
c.	Write mechanism of action of antimetabolite.
d.	Define cotransporter and symporter.
e.	Write the synthesis and uses of methyldopa.
f.	Classify Class I antiarrhythmic agents with example.
g.	Enlist the name of drug used in congestive heart failure.
h.	Draw chemical structure of Sildenafil and Tadalafil.
i.	Discuss the mechanism of action of Thiazolidinediones.
j.	Write the synthesis of Benzocaine and Procaine.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Classify antihistaminic agents with their chemical structure. Explain SAR of antihistamines. Discuss the synthesis and uses of Cimetidine.
b.	What is hypertension. Discuss in detail about drugs acting on Renin-Angiotensin system.
c.	What are lipoproteins? Classify antihyperlipidemic agents with suitable examples. Discuss the SAR of fibric acid derivatives.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a.	Describe the nomenclature and stereochemistry of steroids.
b.	Explain in detail about SAR of local anaesthetics.
c.	Discuss SAR and mechanism of action of alkylating agents.
d.	Explain the synthesis and uses of acetazolamide, chlorthiazide and nitroglycerine.
e.	Write mechanism of action and uses of Menadione, Acetomenadione, Anisindione and clopidogrel. Also write the synthesis of warfarin.
f.	Write a note on Oral contraceptives. Discuss the mechanism of action and uses of Mifepristone, Norgestril and Levonorgestrol.
g.	Discuss in detail about insulin and its preparation. Describe the mechanism of action, uses and synthesis of Tolbutamide.

Sub Code:BT501T

Paper Id: 150716 Roll No:

B. PHARM
(SEM-V) THEORY EXAMINATION 2019-20
MEDICINAL CHEMISTRY-II

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a. Draw structure and write uses of diphenhydramine hydrochloride.

b. Write mechanism of action of methotrexate.

c. Draw structure and write mechanism of action of verapamil.

d. Draw the structure and uses of loop diuretics drugs.

e. Discuss mechanism of action and uses of lovastatin.

f. Write a short note on digitoxin.

g. Write mechanism of action and draw structure of sildenafil.

h. Discuss the advantages of amide local anesthetics over ester local anesthetics.

i. Write a short note on thiazolidinediones.

j. Discuss about metabolic pathway of insulin.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a. Write the SAR and mechanism of action of H_2 receptor antagonists.

b. Write the synthesis and MOA of Acetazolamide.

c. Classify antianginal drug. Give the synthesis and SAR of isosorbide dinitrite.

SECTION C

3. Attempt any *five* parts of the following: **5 x 7 = 35**

a. Give the SAR and synthesis of disopyramide phosphate.

b. Classify anticoagulants. Write the SAR and synthesis of warfarin.

c. Classify antithyroid drugs and write a detailed note on propylthiouracil.

d. Classify sulphonyl ureas and biguanides derivative. Write SAR of tolbutamide.

e. Write the structural classification of local anesthetics, write the mechanism of benzocaine.

f. Write the SAR and mechanism of action of meclorethamine.

g. Write the structural classification of oral contraceptives.

Printed Pages:01 **Sub Code: BP-502T**

Paper Id: 231421 **Roll No.** | | | | | | | | | | |

B PHARM
(SEM V) THEORY EXAMINATION 2022-23
INDUSTRIAL PHARMACY-I

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a. Distinguish drugs on the basis of BCS classification.

b. Classify tablets based on route of administration.

c. Enlist various steps involved in pelletization process.

d. Determine the base adsorption and minim per gram factor in capsules.

e. Classify propellants used in aerosols.

f. Explain significance of isotonicity in ophthalmic preparations.

g. Enlist the methods used for preparing soft gelatin capsule.

h. Classify all types of glass used in pharmaceutical packaging.

i. Define preformulation studies.

j. Define SPF.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a. Analyze the processing problems encountered during manufacturing of coated tablets and suggest remedies to resolve the same.

b. Explain the preparation of dry powder by lyophilisation. Evaluate quality control tests for parenterals.

c. Describe the basic components of a valve and aerosol container and broadly cite their importance.

SECTION C

3. Attempt any *five* parts of the following: **5 x 7 = 35**

a. Estimate various quality control tests for aerosols.

b. Illustrate the application of preformulation studies in development of new chemical compound.

c. Depict the manufacturing of hard gelatin capsules.

d. Illustrate the production facilities and various control for manufacturing of parenteral dosage forms.

e. Predict the legal and official requirements for packaging materials.

f. Investigate the processing problem encountered during liquid preparation.

g. Discuss different granulation method.

PAPER ID-410826

Subject Code: BP502T

Roll No: | | | | | | | | | | | | | |

B PHARM
(SEM V) THEORY EXAMINATION 2021-22
INDUSTRIAL PHARMACY-1

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	List various components of pharmaceutical aerosol.
b.	Differentiate between dextrorotatory and levorotatory.
c.	What are basic steps of process of dry granulation?
d.	What are the glidants?
e.	What is deflocculated system?
f.	What are different sources of pyrogen contamination?
g.	What are the factors affecting the drug absorption from ophthalmic route?
h.	Enlist the optimizable properties of powder layering technique?
i.	Why gelatin is the most preferred shell formulating material for capsules?
j.	Which type of glass consume the least volume of acid in Powdered Glass Test?

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Describe various materials used for packaging of pharmaceutical products with regards to their benefits, limitations and remedy to overcome such limitations.
b.	Illustrate the rotary die process with the help of flow chart, diagram, and underlying principle.
c.	Explain the in-process and finished product quality control tests for tablet dosage form based on pharmacopoeia standards and specifications.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a.	Explain various processing problems of uncoated tablet and their remedies.
b.	Discuss the evaluation of ophthalmic preparation as per pharmacopoeia standards and specifications.
c.	Illustrate the process to prepare lyophilized parenteral products with the help of well labelled diagram.
d.	Explain equipment for manufacture of pellets with well labelled diagram.
e.	Discuss the application of pre-formulation considerations in the development of tablet dosage form with appropriate industry related case study.
f.	Discuss briefly about formulation of cold cream.
g.	Discuss the in-process and finished product quality control tests for pharmaceutical aerosols based on pharmacopeia standards and specifications.

PAPER ID-310394

Roll No:

Subject Code: BP502T

B PHARM
(SEM-V) THEORY EXAMINATION 2020-21
INDUSTRIAL PHARMACY-I

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	What do you mean by preformulation studies?
b.	How are drugs classified as per BCS?
c.	What is the role of binders in manufacturing tablets?
d.	Define super-disintegrants with examples.
e.	What are the various sizes of capsules available for human use?
f.	What do you mean by Bloom Strength?
g.	Explain significance of isotonicity in parenteral formulations.
h.	Define aseptic processing.
i.	What is the function of propellants in aerosol system?
j.	Define tamper evident packaging.

SECTION B

2. Attempt any *two*parts of the following: **2 x 10 = 20**

a.	Discuss in detail about various tests which are generally done to maintain the quality control of tablets.
b.	What are the advantages of capsules as dosage form? Discuss in detail about various mechanisms of filling powders in hard gelatin capsules.
c.	Classify different types of Parenteral products. How are parenteral products evaluated for quality control?

SECTION C

3. Attempt any *five*parts of the following: **7 x 5 = 35**

a.	What is the significance of pka and pH in preformulation studies?
b.	Discuss the principle and working of Rotary tablet press in detail.
c.	How is coating of tablets beneficial? Discuss working of a coating pan.
d.	Elaborate the process of manufacturing of hard gelatin capsule shell.
e.	How are dry powders for injection prepared by Lyophilization?
f.	What are the various components of Aerosol product? Explain significance of each.
g.	Discuss various quality control tests of Glass as a packaging material.

Sub Code:BP502T

Paper Id: 150717 Roll No:

B. PHARM
(SEM-V) THEORY EXAMINATION 2019-20
INDUSTRIAL PHARMACY I

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a.	Name the type of drug as per BCS classification.
b.	What are the objectives for study of physiochemical characterization of drug substances?
c.	What is crystal bridging during wet granulation?
d.	What are various non Pharmacopoeial test conducted for evaluation of tablets?
e.	Write in brief about IPQC test for capsule.
f.	Draw the labeled diagram of slugging machine.
g.	Amorphous or crystalline drug which will give more stable dosage form and why?
h.	What are WFI and sterile WFI, how they are different?
i.	What is vapour tap and how it is significant?
j.	Name all types of glass used in pharmaceutical packaging.

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a.	What are various defects in tablets and how they may be rectified, explain in detail?
b.	How hard gelatin capsules shells are filled. Discuss about equipments used and principle for hard gelatin capsule filling.
c.	What are selection criteria for containers and closures for parenteral how you will do cleaning of containers and closures?

SECTION C

3. Attempt any *five* parts of the following: 5 x 7 = 35

a.	What are various aims and objectives for preformulation, and how to proceed for preformulation?
b.	Write note on physics of tablet.
c.	How to evaluate suspension explain?
d.	Write various advantages and disadvantages for parenteral products.
e.	How particle size of drug may affect development of stable dosage form?
f.	How will you formulate tooth paste, explain and give preparation method for the same.
g.	What are various parts of aerosol valve explain with diagram?

Printed Pages: 1 | Sub Code: BP503T

Paper Id: 231027 | Roll No. | | | | | | | | | | |

B PHARM
(SEM V) THEORY EXAMINATION 2022-2023
PHARMACOLOGY-II

Time: 3 Hours | *Total Marks: 75*

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **2 x 10= 20**

a. Define inotropic agents with suitable example.

b. Write mechanism of action and uses of statins.

c. Give example and uses of plasma volume expanders.

d. Write mechanism of action and uses of streptokinase.

e. Write a short note on 5-HT$_3$ antagonists.

f. Write uses of prostaglandin analogues.

g. Enlist hormones regulating plasma calcium level.

h. How thyroid hormones play a crucial role in metabolism?

i. What do you mean by Tocolytics?

j. Highlight the advantages of multiple point bioassay.

SECTION B

2. Attempt any *two* parts of the following: **10 x 2 = 20**

a. Illustrate pharmacology of anti-hypertensive drugs and design drug therapy for management of hypertension during pregnancy.

b. Classify NSAIDs and explain pharmacology of aspirin.

c. Explain pharmacology of oral hypoglycemic agents.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a. Classify anti-arrhythmic drugs and discuss the role of digitalis in arrhythmia.

b. Classify anti-coagulants. Discuss mechanism of action and uses of heparin.

c. Classify diuretics and describe pharmacology of loop diuretics.

d. Classify H$_1$ receptor antagonists and give a comparative note on first generation and second generation anti-histaminic.

e. Outline pharmacology of glucocorticoids.

f. Describe the principles and applications of bioassay.

g. Discuss pharmacology of oral contraceptives.

PAPER ID-410124

Subject Code: BP503T

Roll No:

B PHARM
(SEM V) THEORY EXAMINATION 2021-22
PHARMACOLOGY II

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	Discuss starling's Law.
b.	Enlist drugs acting on Renin-angiotensin system.
c.	Aspirin can be used as antiplatelet drug. Justify.
d.	Compare spironolactone and amiloride.
e.	Define autacoids and classify them.
f.	How colchicine is effective in improving gout?
g.	Classify hormones secreted from pituitary glands.
h.	Explain the hormonal control of insulin release.
i.	What do you understand by anabolic steroids? Give examples.
j.	Summarize applications of bioassay.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Enlist antihypertensive drugs. Give pharmacology of nitrates.
b.	Classify diuretics. Give mechanism, pharmacological actions, side effects, uses and limitations of furosemide.
c.	What are various thyroid inhibitors. Explain pharmacology of thioamides.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a.	Discuss the detailed pharmacology of digoxin.
b.	Classify antihyperlipidemic drugs. Explain mechanism and side effects of statins.
c.	Describe physiological and pathophysiological roles of prostaglandins.
d.	Write pharmacological action, adverse drug reaction, uses and interaction of aspirin.
e.	Classify antihyperglycemic drugs. Discuss mode of action of sulfonylurea.
f.	Describe the pharmacology of oxytocin.
g.	Discuss bioassay of insulin.

Subject Code: BP503T

PAPER ID-310009

Roll No: | | | | | | |

B PHARM
(SEM-V) THEORY EXAMINATION 2020-21
PHARMACOLOGY-II

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	Define arrhythmia. What do you understand by re-entry?
b.	Write the mechanism of action of nitrates.
c.	Low molecular weight heparin is better than high molecular weight heparin. Justify.
d.	How aspirin acts as antiplatelet?
e.	Summarize the physiological and pathological role of prostaglandins on uterus and cardiovascular system.
f.	Illustrate the mode of action of allopurinol as anti-gout drug.
g.	Enlist various endocrine glands and hormones secreted by each of them.
h.	Explain the regulation of insulin secretion.
i.	Define Bioassay. Classify various types of bioassay.
j.	What are anabolic steroids?

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Classify drugs for CHF. Describe the mechanism, pharmacological action, uses, interactions of digitalis.
b.	Enlist NSAIDs. Discuss the detailed pharmacology of aspirin.
c.	Summarize the class of drugs acting on uterus. Explain the pharmacology of oxytocin.

SECTION C

3. Attempt any *five* parts of the following: **5 x 7 = 35**

a.	Classify antihyperlipidemic drugs and discuss the pharmacology of HMG-CoA reductase inhibitors.
b.	What are hematinic? Discuss the pharmacological actions and uses of iron.
c.	Illustrate the mode of action, uses and adverse reactions of warfarin sodium.
d.	Demonstrate arachidonic acid pathway. Explain the physiological and pathological roles of prostaglandins.
e.	Classify various types of diabetes. Explain the mode of action, adverse reactions, interactions and uses of insulin.
f.	Classify thyroid inhibitors. Explain the pharmacology of thioamides.
g.	Describe various types of oral contraceptives. Explain the rationale of oral contraception.

Printed Pages:01 **Sub Code: BP-504T**

Paper Id: 231208 **Roll No.** | | | | | | | | | | |

B PHARM

(SEM V) THEORY EXAMINATION 2022-23

PHARMACOGNOSY-II

Time: 3 Hours ***Total Marks: 75***

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 2 x 10 = 20

(a) Differentiate between primary and secondary metabolites with suitable examples.

(b) Give biosynthetic flow of production of various primary and secondary metabolites.

(c) Discuss chemical constituents and uses of asafoetida.

(d) What is the therapeutic significance of ginger?

(e) Explain Stas-otto method for extraction.

(f) Discuss physico-chemical properties of resins.

(g) What is the biological source and uses of artemisinin?

(h) Give chemical identification test of digoxin.

(i) Explain decoction process of extraction.

(j) What do you mean by theoretical plates in chromatography?

SECTION B

2. Attempt any *two* parts of the following: 10 x 2 = 20

(a) Discuss shikimic acid pathway with its significance in biogenesis.

(b) Discuss complete pharmacognosy of opium and digitalis.

(c) Elaborate various chromatographic techniques with their significance. What is herbal fingerprinting?

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

(a) Write a note on the application of radioactivity in the investigation of biogenetic pathway.

(b) Discuss biological source, chemical constituents and uses of belladonna. Give extraction of atropine.

(c) Write a note on application of various spectroscopic techniques in identification of crude drugs.

(d) Explore industrial production, estimation and utilization of Sennosides.

(e) Discuss biological source, chemical constituents, uses of ruta, and citral extraction.

(f) Discuss industrial production, estimation and utilization of Podophyllotoxin.

(g) Discuss biological source, chemical constituents, uses of Rauwolfia, and Reserpine extraction.

Subject Code: BP504T

PAPER ID-410593

Roll No: | | | | | | | | | | | | | |

B PHARM
(SEM V) THEORY EXAMINATION 2021-22
PHARMACOGNOSY AND PHYTOCHEMISTRY-II

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a.	Define chromatography with suitable example.
b.	Discriminate primary and secondary metabolites with example.
c.	Differentiate TLC and HPTLC.
d.	Write chemical test used to identify Cardiac glycosides.
e.	Differentiate hydrolysable and condensed tannins with example.
f.	Write the bio-sources and medicinal uses of Benzoin and Clove.
g.	Enlist various modern methods used for extraction.
h.	Define tannin. Write chemical test of tannins.
i.	Write biological source and chemical constituents of Tea and Taxol.
j.	Define radiotracer technique. Enlist various detectors used in tracer techniques.

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a.	Explain in detail about shikimic acid biosynthetic pathway.
b.	Describe the application of HPLC techniques used for standardization of herbal drugs.
c.	Illustrate industrial production, estimation and utilization of Forskolin and Caffeine.

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

a.	Explain isolation of Atropine and Podophyllotoxin.
b.	Discuss bio-sources, therapeutic uses and commercial applications of Opium and Digitalis.
c.	Write about isolation, identification and analysis of Quinine.
d.	Describe about the industrial production and utilization of Sennosides and Digoxin.
e.	Write short note on Mevalonic Acid pathway
f.	Describe bio-sources, compositions, chemistry and therapeutic uses of Licorice and Rauwolfia.
g.	Describe in detail about application of spectroscopic techniques used for quality control studies of herbal drugs.

Roll No:

B PHARM
(SEM V) THEORY EXAMINATION 2020-21
PHARMACOGNOSY AND PHYTOCHEMISTRY -II

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	General chemical tests for terpenoids.
b.	Specific identification test for caffeine.
c.	Therapeutic and commercial applications of senna and vinca.
d.	Applications of chromatography in the identification of crude drugs.
e.	Applications of amino acid pathway.
f.	Biosources of catechu and Asafoetida.
g.	Composition and therapeutic uses of gentian and benzoin
h.	Estimation of sennosides.
i.	Different species of senna.
j.	Chemical tests for resins.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Application of Chromatographic techniques in the isolation, purification and identification of crude drugs.
b.	Industrial production, estimation and utilization of caffeine and forskolin
c.	Isolation, Identification and Analysis of Menthol.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a.	Shikimic Acid Pathway.
b.	Pharmacognostical study of Lignans.
c.	Isolation and Analysis of Curcuma.
d.	Industrial production and estimation of Artimisinin..
e.	Application of HPTLC on the isolation and identification of crude drugs.
f.	Composition, chemical class and therapeutic uses of pterocarpus.
g.	Isolation of Rutin and Citral.

Sub Code:BP504T

Paper Id: 150719 Roll No:

B. PHARM
(SEM-V) THEORY EXAMINATION 2019-20
PHARMACOGNOSY II – Theory

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a. Enlist general chemical tests for terpenoids.
b. Write specific identification test for caffeine.
c. Enlist therapeutic and commercial applications of senna and vinca.
d. Write applications of chromatography in the identification of crude drugs.
e. What are applications of amino acid pathway?
f. Enlist biosources of catechu and Asafoetida.
g. Write composition and therapeutic uses of gentian and benzoin
h. Write a short note on estimation of sennosides.
i. Enlist various different species of senna.
j. Write a short note on chemical tests for resins.

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a. Write about application of Chromatographic techniques in the isolation, purification and identification of crude drugs.
b. Industrial production, estimation and utilization of caffeine and forskolin
c. Isolation, Identification and Analysis of Menthol.

SECTION C

3. Attempt any *five* parts of the following: 5 x 7 = 35

a. Write a detailed note on Shikimic Acid Pathway.
b. Discuss chemistry and commercial applications of Lignans.
c. Describe isolation and Analysis of Curcuma.
d. Describe Industrial production and estimation of Artimisinin.
e. Application of HPTLC on the isolation and identification of crude drugs.
f. Write composition, chemical class and therapeutic uses of pterocarpus.
g. Discuss about isolation of Rutin and Citral.

Printed Pages:01 **Sub Code: BP505T**

Paper Id: 231622 **Roll No.** | | | | | | | | | | |

B PHARM
(SEM -V) THEORY EXAMINATION 2022-23
PHARMACEUTICAL JURISPRUDENCE

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a. Define adulterated drugs.

b. What are schedules J and M?

c. What do you mean by the forensic pharmacy?

d. Define the term "retail sale".

e. Define the term "restricted license"

f. Write the objectives of the medicinal and toilet preparation act.

g. Define magic remedy.

h. What are CPCSEA guidelines?

i. Give a short note on the patent.

j. Write the pharmacist's oath.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a. Discuss in detail about right to information act (RTI).

b. What is the national list of essential medicines (NLEM)? Write objectives of drug price control order (DPCO).

c. Write the constitution and functions of the narcotic & psychotropic consultative committee.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a. Explain the qualifications, powers, and duties of drug inspectors.

b. Write offense and penalties under the sale of drugs.

c. Discuss the classes of drugs and cosmetics prohibited from import.

d. What do you understand by loan license and repacking license?

e. Write terms and conditions for the cultivation and collection of the opium poppy.

f. What do you mean by intellectual property rights (IPR)?

g. Define advertisement; What do you mean by exempted advertisement?

Subject Code: BP505T

PAPER ID-411016

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B PHARM
(SEM-V) THEORY EXAMINATION 2021-22
PHARMACEUTICAL JURISPRUDENCE

Time: 3 Hours **Total Marks: 75**

Note: 1. Attempt all Sections.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a. What do you mean by misbranded drug?
b. What are the objectives of Patent Act?
c. What is Hathi Committee?
d. Define Pharmaceutical Jurisprudence.
e. Give examples of any 04 Narcotic drugs.
f. Write in brief about code of Pharmaceutical ethics.
g. Write the full form of CPCSEA and IAEC
h. Define the term Poison.
i. What are schedule G and N?
j. What are the objectives of Trademark Act?

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a. Write in detail about Schedule M (GMP)under D and C Act1940.
b. Describe the classes of drug which can be import, export and transshipment under narcotic drugs and psychotropic substances.
c. Write in detail the constitution and functions PCI.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a. Write in brief the constitution and function of DTAB.
b. Write in brief the qualification, powers and duties of drug Inspector.
c. Give the specimen label for Schedule H and schedule X drug with suitable example?
d. Write a note on drug and cosmetic act 1940 and explain the requirement for obtaining a retail license.
e. Write a note on registration of pharmacists.
f. Write short notes on:
   (i) Pharmacist's role as a member of health care team.
   (ii) Spurious drugs.
g. Define the term advertisement. Mention the objective of Drug and Magic Remedies Act .

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Subject Code: BP505T

B PHARM
(SEM-V) THEORY EXAMINATION 2020-21
PHARMACEUTICAL JURISPRUDENCE

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	What is Schedule G?
b.	Define spurious drug
c.	Define psychotropic substance
d.	Define 'registered pharmacist' and 'medical practitioner'
e.	What is Schedule M?
f.	Write the functions of Drug inspector
g.	Define adulterated drug
h.	Define the terms 'absolute alcohol' and 'denatured alcohol'
i.	Write the objective of Right to Information Act
j.	Write the objective of Medicinal and Toilet preparation Act-1955.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Explain in detail about Medical Termination of Pregnancy Act
b.	Write a note on licenses required for wholesale of drugs under the provisions of Drug and Cosmetic Act.
c.	Discuss in brief about CPCSEA guidelines for Breeding and Stocking of Animals

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a.	Write a short note on Intellectual Property Rights (IPR).
b.	Discuss the GMP guidelines mentioned under the Schedule M
c.	Describe the procedure for obtaining a patent. Write a note on opposition to grant of patent.
d.	Give a detail account on labelling and packing of drug
e.	Write a note on constitution and functions of Pharmacy Council of India.
f.	Describe the provisions for registration and removal of names as notified in the pharmacy act 1948.
g.	Discuss the rules relating to the export, import and transshipment of Narcotic Drugs

Sub Code:BP505T

Paper Id: 150720 Roll No:

B PHARM
(SEM-V) THEORY EXAMINATION 2019-20
PHARMACEUTICAL JURISPRUDENCE

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a.	What do you mean by jurisprudence?
b.	What are the objectives of drug and cosmetics Act 1940?
c.	What do mean by import of the drugs?
d.	Define coca leaf.
e.	Define prepared opium.
f.	Define bonded laboratory.
g.	Write the full form of CPCSEA and NLEM.
h.	Define advertisement.
i.	Define misbranded drug.
j.	What are the objectives of RTI Act?

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a.	Write in detail about import of the drug and classes of the drug prohibited from import.
b.	Write in detail about PCI and its constitution with its functions.
c.	Write in detail about pharmaceutical legislations.

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

a.	Write in brief about Schedule-M.
b.	Write in brief about wholesale and retail sale.
c.	What are the prohibited advertisements?
d.	Write in brief about objectives of prevention to cruelty to animals Act 1960.
e.	Write a note on registration of pharmacists.
f.	Write a note on retail price of formulations.
g.	Write in brief about manufacturing outside bond.