

QP Code: 521006

Reg. No.....

**Fifth Semester B. Pharm Degree Regular/Supplementary  
Examinations September 2023  
Medicinal Chemistry II  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Essays**

**(2x10=20)**

1. Classify anti-diabetic agents with examples. Explain the chemistry, mechanism of action and synthesis of any one drug in the category of sulfonyl urea.
2. Define and classify local anaesthetics with examples. Write the synthesis and mechanism of action of any amino benzoic acid derivative.

**Short Notes**

**(7x5=35)**

3. Structure, mechanism of action and uses of nitroglycerin and isosorbide dinitrate.
4. Classify anti-hypertensive agents. Write the structure and uses of captopril.
5. Structure, mechanism of action and uses of acetazolamide and hydrochlorothiazide.
6. Write briefly on anti-hyperlipidemic agents.
7. Write the chemistry and synthesis of disopyramide phosphate.
8. Short note on insulin and its preparations.
9. Structure, mechanism of action and uses of digoxin and digitoxin.

**Answer Briefly**

**(10x2=20)**

10. Write the structure of omeprazole and chlorambucil.
11. Mechanism of action and uses of cimetidine.
12. Write the chemical structure of L-thyroxine and propylthiouracil.
13. Outline the synthesis of furosemide.
14. Mechanism of action and uses of mannitol
15. Therapeutic uses of dexamethasone and methimazole.
16. Mechanism of action and uses of lovastatin.
17. Structure and Mechanism of action of sildenafil.
18. Outline the synthesis of warfarin.
19. Mechanism of action and uses of cisplatin.

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**Fifth Semester B. Pharm Degree Supplementary Examinations  
December 2023  
Formulative Pharmacy  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Essays**

**(2x10=20)**

1. Discuss the various techniques used in preparation of pharmaceutical pellets. Add a note on the equipment used for the manufacture of pellets.
2. Briefly explain the quality control tests for a) In process b) Finished products for Tablets. Describe two methods of tablet coating.

**Short Notes**

**(7x5=35)**

3. Describe the working of a semi-automatic capsule filling machine.
4. Explain Toothpastes.
5. Explain the filling and sealing of ampoules.
6. Hydrolysis and Polymerization.
7. Stability studies of Pharmaceutical Aerosols.
8. Classify Capsules. Define bloom strength and its significance.
9. Briefly explain the method of dry granulation for tablets.

**Answer Briefly**

**(10x2=20)**

10. Enlist the types of aerosol system.
11. Explain sterile powders
12. Define direct compression method.
13. Write the formula for vanishing cream.
14. What are pyrogens.
15. What are eye ointments.
16. Importance of isotonicity.
17. Sunscreens.
18. Valves for Aerosols.
19. Classification of tablets.

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Reg. No.....

**Fifth Semester B. Pharm Degree Regular/Supplementary  
Examinations September 2023  
Pharmacology II  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Essays**

**(2x10=20)**

1. Classify anti-hyperlipidaemic drugs with examples. Write the mechanism, pharmacological actions, uses and side effects of atorvastatin
2. Classify non-steroidal anti-inflammatory agents with examples. Write the mechanism, pharmacological actions, uses and side effects of aspirin

**Short Notes**

**(7x5=35)**

3. Mechanism of action and uses of digoxin
4. Biosynthesis of thyroid hormones
5. Add a note on insulin analogues
6. Bioassay of d-tubocurarine
7. Classify anti-hypertensive drugs with examples
8. Principle and applications of bioassay
9. Pharmacological actions of oxytocin

**Answer Briefly**

**(10x2=20)**

10. Functions of calcitonin
11. Examples for anterior pituitary hormone analogues
12. Name the drugs used for shock
13. Define haematinics and coagulants
14. Mechanism of action of diltiazem
15. Examples for loop diuretics
16. Uses of mifepristone
17. Give examples for oral contraceptives
18. Define angiotensin. Give its functions
19. Explain ACTH. Write its functions

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**Fifth Semester B. Pharm Degree Regular/Supplementary  
Examinations September 2023  
Pharmacognosy and Phytochemistry II  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays**

**(2x10=20)**

1. Define and classify alkaloids with examples. Explain the source and industrial production of atropine.
2. Explain in detail the various techniques used in elucidation of biosynthetic pathways.

**Short Notes**

**(7x5=35)**

3. Describe in detail about column chromatography.
4. Explain industrial production and estimation of artemisinin.
5. Elucidate Shikimic acid pathway.
6. Give the source and method of isolation of caffeine.
7. Describe microwave assisted extraction method.
8. Write the general method of extraction and chemical tests for glycosides.
9. Describe the microscopy of Ginger.

**Answer Briefly**

**(10x2=20)**

10. Morphology of Clove.
11. Write the chemical constituents and uses of Podophyllum.
12. Write the applications of infra-red spectroscopy.
13. Define resin, classify with example.
14. Chemical constituents and identification test for Cinchona.
15. Write the biological source, chemical constituents, and uses of Dioscorea.
16. Chemical constituents of Vinca and uses.
17. Write the method of collection of Opium.
18. Write the biological source, chemical constituents, and uses of Myrrh.
19. Classify tannins with examples.

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**Fifth Semester B. Pharm Degree Supplementary Examinations  
December 2023  
Pharmaceutical Jurisprudence  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays**

**(2x10=20)**

1. Write the composition and functions of DTAB and DCC.
2. Explain the role and functions of drug inspector in Drug and Cosmetic Act.

**Short Notes**

**(7x5=35)**

3. Explain the code of pharmacist in relation to his trade.
4. Explain offences and penalties under Narcotic Drugs and Psychotropic Substances Act 1985.
5. Explain the functions and composition of state pharmacy council and joint state pharmacy council.
6. Write a note on DPCO.
7. Intellectual Property Rights.
8. Explain the approved places according to Medical Termination of Pregnancy Act.
9. What are the offences and penalties as per Prevention of Cruelty to Animals Act.

**Answer Briefly**

**(10x2=20)**

10. Mudaliar Committee.
11. Explain the calculation of prices of bulk drugs.
12. Right to Information Act.
13. Breeding and stocking of animals.
14. List the penalties under Drugs and Magical Remedies Act.
15. Define Schedule P and Schedule U.
16. Examples of permitted colors.
17. Export of alcoholic preparations.
18. Production of poppy straw.
19. National fund for controlling drug abuse.

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