

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Winter 2023 Date:

Course	:	B. Pharmacy	Sem:	V
Subject Name	:	Medicinal Chemistry-II	Subject Code :	BP501T
Max Marks	:	75	Duration	: 3 Hr.

Instructions:

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

Q. 1. Objective Type Questions (Answer all the questions) (10x 2) = 20

- i) Write a note on histamine and its receptor.
- ii) Give scheme of Synthesis for diphenhydramine HCl.
- iii) Discuss mechanism of action of Acetazolamide.
- iv) Write structure and uses of any two amino alkyl ether derivatives as antihistaminic agents.
- v) Write structure and uses of Synthetic estrogens.
- vi) Write MOA of antimetabolites as antineoplastic agent's.
- vii) Give metabolism of steroids.
- viii) Write a note on adrenocorticoids.
- ix) Write a note on drugs used for erectile dysfunction.
- x) Write MOA of K⁺ sparing diuretics.

Q. 2. Long Answers (Answer 2 out of 3) (2 x 10) = 20

- i) Classify antihistaminic agents along with example of each class. Explain in detail H₁-antihistaminics and outline the synthesis of Promethazine HCl.
- ii) What are diuretics? Write its classification along with its structure. Outline the synthesis of Furosemide and write its uses.

- iii) Classify oral antihyperglycemic agents with suitable example and structures. Add a note on Sulfonyl urea as antihyperglycemic agents.

Q. 3. Short Answers (Answer 7 out of 9)

(7 x 5) = 35

- i) What are lipid lowering agent? Give structure and uses of Lovastatin, Clofibrate and Cholestyramine.
- ii) Classify Antiarrhythmic agents with example. Give Synthesis of Disopyramide phosphate.
- iii) Write a note on cardiac glycosides used in the treatment of CHF.
- iv) Write a note on Anticoagulant. Give scheme of synthesis for warfarin.
- v) Explain carbonic anhydrase inhibitors and Give Synthetic scheme for Acetazolamide.
- vi) Write a note on steroids.
- vii) What are antihypertensive agent? Explain with example.
- viii) What are local anaesthetics? Give their SAR.
- ix) What are lipid lowering agent? Give structure and uses of Lovastatin, Clofibrate and Cholestyramine.

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE.
END SEMESTER EXAMINATION WINTER-2023

Course: Bachelor of Pharmacy (B. Pharm)
Subject: INDUSTRIAL PHARMACY-I (THEORY)
Time: Three Hours

Date: 05/01/2024

Semester: Fifth Semester
Subject Code: BP 502 T.
Maximum Marks: 75

Note: 1. Question No.1 is compulsory
2. Attempt any **two** question from Que. No. 2
3. Solve any **seven** from Que. No. 3

Que. No. 1. Attempt all questions: -

10 x 2 = 20

- Define preformulation. Enlist the physical and chemical properties of drug substance evaluated for preformulation study.
- Define tablet. Mention the reason for its popularity.
- What is the need of coating of tablet and what are the different types of tablet coating?
- Write advantages of pellets
- Draw a schematic labelled diagram of an Aerosol container.
- What are diffusible and indiffusible solids?
- Name the excipients commonly used for making capsule dosage form.
- What is the importance of isotonicity in parenteral formulation with suitable example?
- What are the excipients added in ophthalmic preparations?
- What is important role of packaging materials?

Que. No. 2. Answer any TWO questions.

2 x 10 = 20

- What is aerosol? Explain the different types of aerosols system and quality control parameters for Aerosols.
- Define parenteral formulation along with advantages and limitations. Describe the process of production, facilities and control of parenteral formulation.
- Enlist different excipients and role of excipient used in formulation of tablets. Explain tablet compression and processing problems along with remedies.

Que. No. 3. Answer any SEVEN questions.

7 x 5 = 35

- Describe the various aspects of environmental protection of pharmaceutical products considered in packaging
- Differentiate the cold cream and vanishing cream. Discuss the composition and formulation of vanishing cream.
- Explain the in-process and finished product quality control test for tablet.
- Define coating. Describe steps for sugar coating along with its advantages and disadvantages.
- Describe in brief sterility test for parenterals.
- Explain detailed method of preparation of emulsion with example.
- Describe production process of hard gelatin capsule shell.
- Explain BCS classification system (BCS) along with its application.
- Explain formulation aspects of preparation of ophthalmic formulation with example.

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End Semester Examination- Winter 2023

Date: 08/01/2024

Course: B. Pharmacy

Semester: V

Subject Name: Pharmacology- II

Subject code: BP503T

Max Marks: 75

Duration: 3 Hr.

Instructions to candidate:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Illustrate your answers with diagrams wherever necessary.

Q.1. Objective Type Questions (Answer all the questions)

(10×2)=20

- i. Define arrhythmia. Write causes of arrhythmia
- ii. Explain Biosynthesis and physiological role of 5HT
- iii. Explain MOA of DPP4-inhibitors.
- iv. Explain why potassium sparing diuretics given with loop diuretics.
- v. Explain different classes of angina.
- vi. Classify NSAID with suitable examples.
- vii. Write the principles of Bioassay.
- viii. Enlist hormone secreted by pituitary gland.
- ix. Explain MOA of Aspirin as a antiplatelet agent
- x. Classify antihypertensive agents.

Q.2. Long Answers (Answer 2 out of 3)

(2×10)= 20

- i. Explain Pathophysiology of CHF. Classify the drug's use in treatment of CHF.
Explain Pharmacology of digitalis.
- ii. What are Autocoids? Classify them. Explain synthesis, release and pharmacology of Histamine. Classify anti-histaminic drugs and write MOA, pharmacokinetics, AE of H₁ receptor antagonists.
- iii. Classify oral anti-diabetic drugs with examples and explain the MOA, Pharmacokinetics, AE of Biguanides and PPAR gamma activators.

(7×5)= 35

Q.3. Short Answers (Answer 7 out of 9)

- i. Write a note on Plasma Volume Expander.
- ii. Classify Antigout drugs. Explain MOA, Pharmacokinetics, AE of Allopurinol.
- iii. Classify fibrinolytic agents. Add and note on Streptokinase.
- iv. Write a note on SERM.
- v. Define bioassay. Explain bioassay of oxytocin.
- vi. Classify diuretics. Explain MOA and AE of loop diuretics.
- vii. Write note Thyroid hormones analogues and their inhibitors.
- viii. Classify Anti-hyperlipidemic drugs. Explain MOA of statins and Bile acid sequestrants.
- ix. Explain shock and give clinical classification of shock.

-----End of Paper-----

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Winter 2023

Date: 10/01/2024

Course:	T.Y.B. Pharmacy	Sem:	V
Subject Name:	Pharmacognosy and Phytochemistry - II	Subject Code:	BP504T
Max Marks:	75	Duration:	3 Hrs.

Instructions:

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

- Q. 1. Objective Type Questions (Answer all the questions) (10 x 2) = 20**
- i) Write identification test of Quinine.
 - ii) Define metabolites and metabolic pathway.
 - iii) Suggest a chemical test for tropane alkaloids and explain it.
 - iv) Draw a neat labelled diagram of the T. S. of Ephedra stem.
 - v) Write the biological source and uses of Senna leaf.
 - vi) Give the source and utilization of Artemisinin.
 - vii) Write adulterants of Clove flower bud.
 - viii) Write the chemical structure of Reserpine and Rutin.
 - ix) Define radioactive isotopes with examples.
 - x) Name any two resinous drugs and give their uses.
- Q. 2. Long Answers (Answer 2 out of 3) (2 x 10) = 20**
- i) Explain Shikimic acid pathway and its significance.
 - ii) Enumerate any four modern methods of extraction and explain in detail about Super Critical fluid extraction with their advantages and disadvantages.
 - iii) Discuss the industrial production and utilization of Atropine and caffeine.
- Q. 3. Short Answers (Answer 7 out of 9) (7 x 5) = 35**
- i) Write the isolation and analysis of Glycyrrhetic acid.
 - ii) Give the biological source, chemical tests and uses of Benzoin.
 - iii) Explain column chromatography.
 - iv) Prepare a note on Spectroscopy in identification of Phytoconstituents.
 - v) Write botanical source and chemical constituents and uses of Digitalis.
 - vi) Define Glycoside. Classify glycosides based on the glycosidic linkages.
 - vii) Compare and contrast Pale catechu and Black catechu.
 - viii) Write biological source, chemical constituents and uses of Deadly night shade plant.
 - ix) Define tracer technique and explain in brief steps involved in the tracer techniques.

-----END OF THE PAPER-----

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination–Winter 2023

Date: 12/01/2024

Course : B. Pharmacy

Sem : Vth

Subject Name : Pharmaceutical Jurisprudence

Subject Code : BP505T

Max Marks : 75

Duration : 3 Hrs.

Instructions:

1. All questions are compulsory
2. Draw diagram/figures wherever necessary
3. Figures to right indicate full marks

Q.1. Objective type questions (Answer all the questions).

10x2=20 Marks

- i) Define the term (a) Misbranded drugs (b) Medical Practitioner
- ii) Write qualification required for drug inspectors.
- iii) Define as per NDPS Act (a) Narcotic drugs (b) Opium derivatives
- iv) List out the Scheduled X drug.
- v) Enlist the function of Pharmacy Council of India.
- vi) What is National List of Essential Medicines.
- vii) Write short notes on Blood Bank.
- viii) Define bonded and non-bonded laboratory.
- ix) Give formula for calculation of retail price as per DPCO 1995 with explanation of terms used in formula.
- x) Write the objective of Pharmacy Act 1948.

Q.2. Long Answer (Solve any TWO)

2X10= 20 Marks

- i) Explain in detail the working of bonded and non bonded manufacturing of Medicinal and Toilet Preparations.
- ii) Write in details for approval of institution on carrying out test on Drugs, Cosmetics & Raw Materials.
- iii) What is Objective & Definition for Animal, Cruelty & Poisons as per Animal Act 1960. Write notes on Constitution & Rules of CPCSEA.

Q.3. Short Answers (Solve any SEVEN)

7x5 = 35 Marks

- i) Detail List of minimum equipment for the efficient running of the pharmacy.
- ii) Write short note on Education Regulation as per Pharmacy Act 1948.
- iii) Discuss the classes of advertisement Prohibited under Drug and Magic Remedies Act.
- iv) Write the procedure for import of registration.
- v) Write the procedure for Labeling & Packaging of drugs other than Homeopathic medicine.
- vi) With emphasis on ethics and law, explain duties of pharmacist in relation to his Job and trade.
- vii) What is National Pharmaceutical Pricing Authority of India. Explain salient features of DPCO 2013.
- viii) Write the history of Pharmaceutical Legislation in India. Write notes on DEC.
- ix) Define patent, mention its types. Give the procedure for patenting of inventions.

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