

Date: 09/06/2023

Course :	B. Pharmacy	Sem:	VII
Subject Name :	Instrumental Methods of Analysis	Subject Code :	BP 701T
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)

(10 x 2) = 20

- i) Name the spectral shifts that occur in UV region.
- ii) Differentiate between isocratic and gradient elution in chromatography.
- iii) Define derivatization. List methods of derivatization in Gas Chromatography
- iv) Mention equations for Beer's and Lambert's Law.
- v) Define quenching. List factors affecting quenching.
- vi) Enlist any four the applications of Atomic Absorption spectroscopy.
- vii) Distinguish between nephelometry and turbidimetry.
- viii) Justify- buffers are used in ion exchange chromatography.
- ix) Define R_f value. Enlist the factors that affect R_f value.
- x) How aldehyde and ketone can be differentiated in IR spectrum.

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

(2 x 10) = 20

- i) Discuss the principle, instrumentation and applications of HPLC.
- ii) Explain the principle, instrumentation, sampling techniques of IR spectroscopy.
- iii) Describe in brief the principle, instrumentation and applications of gas chromatography.

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

(7 x 5) = 35

- i) Discuss the principle of fluorescence using Jablonski diagram.
- ii) Define and classify Ion Exchange resins with examples.
- iii) Describe different development techniques used in Paper Chromatography.
- iv) Explain the principle, theory and applications of gel chromatography.
- v) Explain in brief the various types of electronic transitions occur in UV-Visible spectroscopy.
- vi) Elaborate the different vibrational modes in polyatomic molecules upon IR absorption
- vii) Describe the TLC with different methods for preparations of TLC plates.
- viii) Differentiate between adsorption and partition column chromatography.
- ix) Discuss the principle and interferences occurs in flame photometry

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Date: 12/06/2023

Course : B. Pharmacy
Subject Name : Industrial Pharmacy-II
Max Marks : 75

Sem : VII
Subject Code : BP702T
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)

(10 x 2) = 20

- i) What is pilot plant? Write its objective.
- ii) What is Technology Transfer? Write about general idea of Technology Transfer.
- iii) Give contents of Investigator's Brochure.
- iv) What is Quality Management system and Quality certification?
- v) Describe IND. Give types of IND application.
- vi) Write the different phases of Human clinical trials.
- vii) Enlist various Regulatory authorities world wise.
- viii) What is ISO? What is its objective?
- ix) What are contents of COPP?
- x) Write the objective of GLP.

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

(2 x 10) = 20

- i) Discuss general consideration and importance of pilot plant scale up. Explain in details about pilot plant scale up for solids.
- ii) What is NDA? Give its significance and describe process for NDA submission in USA and INDIA.
- iii) Explain about central drug standard control organization (CDSCO).

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

(7 x 5) = 35

- i) Enumerate the importance of TQM in pharma industry.
- ii) Summarize the biostatistics in pharmaceutical product development.
- iii) What do you mean by Platform Technology? List them. Discuss any four such platform technologies.
- iv) Explain QbD in pharmaceuticals.
- v) Elaborate Six Sigma concept in detail.
- vi) Explain role and responsibilities of Regulatory Affair Expert.
- vii) Write a note on SUPAC.
- viii) Discuss stepwise NABL accreditation.
- ix) Write a note on COPP.

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

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE
Supplementary End Semester Examination- Summer 2023

Date: 21.06.2023

Course: B. Pharmacy
Subject Name: Pharmacy Practice
Max Marks: 75

Sem: VIII
Subject Code: BP703T
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)	(10 x 2) = 20
i) What is Pharmacy and Therapeutic Committee?	
ii) Define TDM.	
iii) What is a drug interaction?	
iv) Enlist different forms and forms numbers required to set up retail. Drugstore.	
v) Draw a well-labeled diagram of a hospital pharmacy.	
vi) What are OPD and IPD?	
vii) Enlist sources of drug information.	
viii) Define controlled drugs.	
ix) Enlist any four functions of a clinical pharmacist.	
x) What do you mean by prescribed medication order?	
Q. 2. Long Answers (Answer 2 out of 3)	(2 x 10) = 20
i) Give functions of hospital pharmacy. Illustrate the organization structure, location, and layout of the hospital pharmacy.	
ii) Define adverse drug reactions, and give their detail classification. Add a note on adverse drug reaction reporting.	
iii) What is the drug distribution system in the hospital? Illustrate the method of drug distribution to the inpatient area.	
Q. 3. Short Answers (Answer 7 out of 9)	(7 x 5) = 35
i) Define the hospital formulary and give its content.	
ii) What is clinical pharmacy? Explain in brief about ward round participation.	
iii) Give a brief note on the medication chart review.	
iv) Give the principles and classification of investigational drugs.	
v) Illustrate the blood chemistry parameters and their interpretation.	
vi) Discuss the methods used for the analysis of the drug expenditure.	
vii) Explain in brief the location and layout of the retail drugstore.	
viii) Define hospital. Give in detail classification of hospital.	
ix) Add a brief note on the drug and poison information centre.	

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DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE
Supplementary Examination Summer - 2023

Course : B. Pharmacy
Subject Name : Novel drug delivery System
Max Marks : 75

Date: 23/06/2023
Sem: VII
Subject Code: BP704T
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)	(10 x 2) = 20
i) Enlist factors affecting formulation of Controlled drug delivery system.	
ii) Outline Classification of Polymers.	
iii) Give applications of Microencapsulation.	
iv) Give Disadvantages of Implantable drug delivery system.	
v) Enlist Excipients used in Nasal spray formulations.	
vi) Give role of Propellants in Aerosol along with their examples.	
vii) Give examples of Carriers used in targeted drug delivery.	
viii) What are Monoclonal Antibodies? Give any 2 applications of the same.	
ix) Describe role of Viscosity enhancers in improving Ocular Bioavailability	
x) Describe advantages of Intra-uterine devices.	
Q. 2. Long Answers (Answer 2 out of 3)	(2 x 10) = 20
i) What is GRDDS? Give the various approaches for Gastro-retention.	
ii) Define TDDS? Give its advantages & disadvantages. Describe permeation enhancer with examples.	
iii) Explain in detail the various types of Implants.	
Q. 3. Short Answers (Answer 7 out of 9)	(7 x 5) = 35
i) Explain the Various theories of Mucoadhesion.	
ii) Explain Air suspension and Multi-orifice centrifugal process of Microencapsulation.	
iii) Explain the Basic components of transdermal drug delivery system.	
iv) Describe formulation of Nasal sprays	
v) Write a note on Dry Powder Inhalers.	
vi) Write a note on Monoclonal antibodies and their applications.	
vii) Write a note on various Ocular inserts.	
viii) Write a note on various Intra-uterine devices	
ix) Describe in detail the various applications of Polymers.	

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