DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary Summer Examination – 2024

Course: B. Pharmacy **Semester: VII**

Subject Name: Instrumental Methods Of Analysis **Subject Code: BP701T**

Max Marks: 75 **Date: 12-06-2024** **Duration: 3 Hr.**

Instructions to the Students:

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)	Define the terms Accuracy and Precision	
ii)	Explain in detail Beer's Law with its equation.	
iii)	Give a sequence of events occurring in Flame Photometry.	
iv)	What different types of Interference and their Corrections in Atomic Absorption Spectroscopy.	
v)	Write the difference between fluorescence and Phosphorescence.	
vi)	Explain the fundamental vibrations for linear and non linear molecules.	
vii)	What is Chromophore and Oxochrome explain with example.	
viii)	Describe Isocratic and Gradient elution modes in HPLC.	
ix)	Explain the pressed pellet technique in IR.	
x)	Why water cannot be used as a solvent in IR spectroscopy.	
Q.2.	**Long Answers (Answer 2 out of 3)**	**(10 X 2) = 20**
i)	Explain in detail theory of IR Spectroscopy and significance of Hooke's law in IR Spectroscopy.	
ii)	Explain in detail the instrumentation used in Atomic Absorption Spectroscopy	
iii)	Give a brief account of Van Demeter Equation.	
Q.3.	**Short Answers (Answer 7 out of 9)**	**(5 X 7) = 35**
i)	Discuss various pumps in HPLC	
ii)	Give a brief account of Double beam UV spectrophotometer.	
iii)	What is Bathochromic shit and Hypsochromic shift, give a reason why it occur with a suitable example.	
iv)	Give in detail the principle involved in Turbidimetry.	
v)	Write a short on modes of vibrations in IR Spectroscopy.	
vi)	Explain in detail the different types of burners used in Flame Photometry	
vii)	Give applications of Phosphorescence and fluorescence.	
viii)	Write a short note on regions in IR spectrum.	
ix)	Write a short note on Ion Exchange Chromatography.	

***** END OF THE PAPER *****

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DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary Summer Examination – 2024

Course: B. Pharmacy | **Semester: VII**

Subject Name: Industrial Pharmacy II | **Subject Code: BP702T**

Max Marks: 75 | **Date: 14-06-2024** | **Duration: 3 Hr.**

Instructions to the Students:

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 mean by scale up and scale down?	
ii)	Define technology transfer.	
iii)	Enlist the types of qualification.	
iv)	What is bioequivalence study?	
v)	Identify the meaning of CMO.	
vi)	What is mean by analytical method transfer?	
vii)	What is mean by Quality risk management (QRM)?	
viii)	What is GMP certification?	
ix)	Recognize the importance of ISO 14000.	
x)	What is six sigma concept?	
Q.2.	**Long Answers (Answer 2 out of 3)**	**(10 X 2) = 20**
i)	Elaborate in details SUPAC guidelines with various levels of changes in manufacturing.	
ii)	Describe validation master plan and discuss the types of validation.	
iii)	Describe in brief the approval process of new drug.	
Q.3.	**Short Answers (Answer 7 out of 9)**	**(5 X 7) = 35**
i)	Elaborate upon role of regulatory affairs Department.	
ii)	Summarize the content of Investigator's Brochure.	
iii)	Describe the phases of human clinical trial.	
iv)	What is the objective and functions of pilot plant?	
v)	Elaborate upon technology transfer protocol.	
vi)	Write short notes on CDSCO.	
vii)	Discuss information included in IND application.	
viii)	What is total quality management and discuss its elements.	
ix)	Write short notes on elements in GLP.	

***** END OF THE PAPER *****

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DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary Summer Examination – 2024

Course: B. Pharmacy | **Semester: VII**

Subject Name: Pharmacy Practice | **Subject Code:BP703T**

Max Marks: 75 | **Date:18/06/2024** | **Duration: 3 Hr.**

Instructions to the Students:

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 TDM?

ii) Enlist different forms and form number required to set up retail drug store.

iii) What is OPD and IPD?

iv) Define clinical Pharmacist and Enlist four functions of clinical Pharmacist.

v) What is Patient Counselling? Give importance of Patient Counselling.

vi) What is an investigational Drugs?

vii) What is medication non-adherence?

viii) Enlist sources of drug information.

ix) Draw a well-labelled diagram of a hospital pharmacy.

x) What do you mean by prescribed medication order?

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

i) Define Hospital and Discuss various types of classification of Hospital.

ii) What is drug distribution system in Hospital? Explain the method of drug distribution to the inpatient area.

iii) Write organizational structure and function of P & T committee.

Q.3. Short Answers (Answer 7 out of 9) **(5 X 7) = 35**

i) Write the roles and responsibility of Hospital Pharmacist.

ii) Define Adverse Drug Reaction. Write the classification of ADR with example.

iii) Define Hospital Formulary. Explain in detail the contents of Hospital Formulary.

iv) Define Community Pharmacy. Explain the role of community Pharmacy.

v) Define OTC drugs with examples. Give advantages & disadvantages of OTC drugs.

vi) Give a brief note on the medication chart review.

vii) Give a brief note on the drug & Poison information Centre.

viii) What is Inventory control? Describe in detail about ABC technique?

ix) Discuss the Hematology parameters & it's interpretation.

***** END OF THE PAPER *****

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary Summer Examination – 2024

Course: B. Pharmacy **Semester:VII**

Subject Name: NOVEL DRUG DELIVERY SYSTEM **Subject Code: BP704T**

Max Marks: 75 **Date:20-06-2024** **Duration: 3 Hr.**

Instructions to the Students:

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)	Describe nanoparticles along with their general properties.	
ii)	Explain ideal properties of bioadhesive polymer	
iii)	What factors affect the designing of modified drug delivery system?	
iv)	What is targeted drug delivery? Give its applications.	
v)	Write note on conservation method of microencapsulation.	
vi)	Define and compare active & passive targeting.	
vii)	What are the disadvantages of conventional occular drug delivery system	
viii)	What is mucoadhesive drug delivery system? Give its application.	
ix)	Classify Liposome according to structure?	
x)	What are ion exchange resins?	
Q.2.	**Long Answers (Answer 2 out of 3)**	**(10 X 2) = 20**
i)	Explain in detail different methods for formulation of TDDS along with evaluation.	
ii)	Explain in detail various methods of preparation of liposomes	
iii)	Explain in detail formulation methods for nanoparticles along with advantages of nanoparticulate delivery.	
Q.3.	**Short Answers (Answer 7 out of 9)**	**(5 X 7) = 35**
i)	Explain the different theories of mucoadhesion.	
ii)	Explain the evaluation parameters for transthermal patches.	
iii)	Write a short note on contact- lens.	
iv)	What are advantages & disadvantages of implantable drug delivery system	
v)	Explain metered dose inhaler.	
vi)	Describe vapour pressure activated implantable device.	
vii)	Write a short note on biodegradable polymers.	
viii)	Explain the different barriers in occular drug delivery	
ix)	Describe DSC & TGA studies of evaluation of polymer.	