



**ANJUMAN-I-ISLAM'S**

**KALSEKAR TECHNICAL CAMPUS, NEW PANVEL**

Approved by : All India Council for Technical Education, Council of Architecture, Pharmacy Council of India New Delhi,  
Recognised by : Directorate of Technical Education, Govt. of Maharashtra, Affiliated to : University of Mumbai.

- SCHOOL OF ENGINEERING & TECHNOLOGY
- SCHOOL OF PHARMACY
- SCHOOL OF ARCHITECTURE

**QUESTION PAPER PERIODIC TEST- II**

<b>CLASS :- Final Year B. Pharm</b>	<b>SCHEME:- PCI Syllabus</b>	<b>SEM:- VII</b>
<b>SUBJECT:- Instrumental method of analysis</b>		<b>DATE:- 18/8/2023</b>
<b>DURATION:- 60 mins</b>		<b>MARKS:- 30</b>

**Q.01: MCQs**

		<b>Marks</b>	<b>CO</b>
a)	Which device is used to isolate the radiation of the desired wavelength from wavelength of continuous spectra? A. Monochromator B. Radiation Source. C. Recorder D. Detector	1	1,2,4
b)	Select the true statement about fluorescence spectroscopy. A. Emission usually occurs at energies that are greater than excitation energies. B. Emission usually occurs at energies that are smaller than excitation energies. C. Emission usually occurs at energies that are equal to excitation energies. D. None of the above	1	
c)	Which of the following molecules may show IR absorption. A. O <sub>2</sub> B. Cl <sub>2</sub> C. HCl D. N <sub>2</sub>	1	
d)	Talc is ..... adsorbent. A.Strong B. Weak C. Very Strong D. Medium	1	
e)	Fingerprint region lies between A. 4000- 1500 cm <sup>-1</sup> B. 1500-1000 cm <sup>-1</sup> C. 1500-600 cm <sup>-1</sup> D. 4000-400 cm <sup>-1</sup>	1	
f)	.....packing is ideal technique for column. A. Dry B. Hard C. Wet D. Forced	1	
g)	Which of the following is range of absorption of functional group of O-H stretching (Free) in IR? A. 3000cm <sup>-1</sup> B. 2500 cm <sup>-1</sup> C. 3600cm <sup>-1</sup> D. 3200cm <sup>-1</sup>	1	
h)	Globar source gives radiation up to A. 7100cm <sup>-1</sup> B. 2500 cm <sup>-1</sup> C. 5200cm <sup>-1</sup> D. 3200cm <sup>-1</sup>	1	
i)	What will be the concentration in g/100ml of a drug if its Absorbance in 1cm cell at its lambda max, 241 nm, is 0.93(absorptivity at 241 nm is 540) A.0.0017 B 0.00165 C 0.17 D.0.0000017	1	
j)	Which of the following is a non-dispersive type of spectrophotometer A. Spectrofluorometer B Spectrophotometer C. Flame photometer D. FTIR	1	

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<b>Q.02: Long answers (Any one)</b>			
a)	1. Explain Spectral Shift. 2. Lambda max of ephedrine HCl & chlorocresol are 257 nm & 279nm respectively absorptivity value are, EH at 257nm= 9, EH at 279nm=0, chlorocresol at 257nm=20 & chlorocresol at 279 nm= 105. Find concentration of both if Absorbance in 1cm cell: A <sub>279</sub> = 0.397, A <sub>257</sub> = 0.96	10	1, 4
b)	Explain in details instrumentation of IR Spectroscopy with diagram.	10	1
<b>Q.03: Short Answers (Any two)</b>			
a)	Describe Quenching of fluorescence	5	1
b)	i) Explain different vibrational modes in IR.	2.5	1
	ii) Enlist different factors affecting vibrational frequencies	2.5	
	<del>or</del> Discuss sampling techniques in IR		
c)	Explain Stationary phase and Column packing in column chromatography.	5	2





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**FINAL YR. B. PHARM (SEMESTER VII)  
FIRST SESSIONAL THEORY EXAMINATION (2023 - 2024)**

**Subject: INDUSTRIAL PHARMACY-II**  
**Marks:30**

Date 19/08/23

**ALL QUESTIONS ARE COMPULSORY**

Q. N	QUESTIONS	MARKS	CO
	<p><b>MULTIPLE CHOICE QUESTIONS.</b></p> <p>1.The art of designing prototype using data obtained from pilot plant Model is A. Scaling                      B. Model type C. Scale up                      D. Designing</p> <p>2.Out of the following functions of compression process,which one is optional A. Filling of empty die cavity                      B. Compression C. Precompression                      D. Ejection</p> <p>3.Slugging is a process of A. Dry granulation                      B. Wet granulation C. Capsule Manufacturing                      D..Liquid Oral Manufacturing</p> <p>4.Which of the following is used for scale up of wet granulation technique A. Sigma Blade mixer                      B. Propeller C. Impellers                      D. None</p> <p>5. Passivation technique utilizes A. Acetic acid                      B. Potassium hydroxide C. Sodium hydroxide                      D. Hydrogen sulphide gas</p> <p>6. Following is the regulatory agency of UK A.CDSO B. FDA C.MHRA D.MHLW</p> <p>7.Module 4of NDA dossier as per CTD format include A. Clinical study report                      B. Quality overall summary C. Preclinical study report D. Administrative information</p> <p>8. The objective of Phase II clinical trial study is A. To assess safety of drug                      B. To assess efficacy of drug C. To assess bioavailability of drug D. To assess safety and efficacy of drug</p> <p>9. In clinical research CRF implies A. Compliance report form                      B. Case report form C. Constitution report form D. Casualty report form</p> <p>10.Following is the major part of toxicology study A. Determination of bioavailability of drug B. Determination of Metabolism C. Determination of bioequivalence D. Determination of therapeutic index.</p>	<b>10M</b>	<b>1,4</b>

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2	<b>LONG ANSWER QUESTIONS (ATTEMPT ANY ONE)</b>		
a.	Discuss pilot plant scale up considerations of tablet dosage form.		
	OR		
a.	Discuss Pilot plant scale up considerations of liquid orals ( any 2 )	<b>10M</b>	<b>1</b>
3	<b>SHORT ANSWER QUESTIONS (ATTEMPT ANY TWO)</b>		
a.	Differentiate between INDA and NDA		
b.	Write note on Bioequivalence study	<b>10M</b>	<b>4</b>
c.	Discuss in detail common technical document(CTD)		

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REV:00	QUESTION PAPER PERIODIC TEST-1	EXM-04(a)
CLASS :- Final Year B. Pharm		SEM:- VII
SCHEME:- PCI Syllabus		
SUBJECT:- Pharmacy Practice		DATE:- 22/8/23
DURATION:- 60 mins		MARKS:- 30
<b>Q.01:</b>		<b>Marks</b> <b>CO</b>
a) .....methods of coding is known as sequence system method a. Numerical b. Alphābetical c. Location d. Mnemonic		1    3
b) Identify the area which is designed for storing bulk surgical/consumable/disposable items/X-ray films (L2) a. General store    b. Surgical store    c. Retail store    d. Bulk store		1    1
c) Head of the pharmacist should be,,,,,,,,, a. M Pharm b. D Pharm c. B Pharm d. PhD		1    1
d) Which of these is direct method of measuring medication adherence? a. Patient questionnaire b. Patient diary c. Individual prescription order d. Urine analysis		1    4
e) The term ,, is used for uncommon and unexpected drug effects a. Toxicity b. Idiosyncrasy c. Side effects d. Secondary effects		1    2
f) ..... is a detailed, accurate and complete account of all prescribed and non- prescribed medications that patient had taken a. Hospital formulary b. Patient history c. Medication history d. Drug list		1    4
g) TDM is not required for drugs a. Which is liable to interact b. Whose metabolite might be toxic c. Highly protein bound drug d. With wide therapeutic window		1    4
h) Saifee hospital is.....hospital a. Tertiary level b. Secondary hospital c. Primary hospital d. General hospital		1    1
i) Name the head pharmacist who reports to the Administrator. (L2) a. Head Hospital Pharmacist    b. Chief Clinical Pharmacist c. Head Consulting Pharmacist    d. Chief Hospital Pharmacist		1    2

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j)	The most accurate method for TDM involves a. Measurement of medication concentrations in blood b. Measurement of drug efficacy c. Measurement of drug metabolism d. Measurement of renal secretion of drug	1	4
<b>Q.02 : Long answers (Any one)</b>			
a)	Describe the organization structure of hospital pharmacy. Discuss various functions of hospital pharmacy.	10	1
b)	Write an illustrative note on the classification of hospitals with examples	10	1
<b>Q.03 : Short Answers (Any two)</b>			
a)	Write a note on- Factors to be considered during TDM <b>OR</b> Classify ADR with examples	5	4, 5
b)	Define medication history interview. Explain medication interview form <b>OR</b> Legal requirements for establishing a drug store	5	3, 4
c)	Pharmacist role in medication adherence <b>OR</b> Define community pharmacy. Describe the different coding methods	5	3, 4

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a)	Describe the organization structure of hospital pharmacy. Discuss various functions of hospital pharmacy.	10	1
b)	Write an illustrative note on the classification of hospitals with examples	10	1
<b>Q.03 : Short Answers (Any two)</b>			
a)	Write a note on- Factors to be considered during TDM <b>OR</b> Classify ADR with examples	5	4, 5
b)	Define medication history interview. Explain medication interview form <b>OR</b> Legal requirements for establishing a drug store	5	3, 4
c)	Pharmacist role in medication adherence <b>OR</b> Define community pharmacy. Describe the different coding methods	5	3, 4

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REV:00	QUESTION PAPER PERIODIC TEST	EXM-04(a)	
CLASS:- Second Year B. Pharm		SEM:- VII	
SCHEME:- PCI Syllabus		DATE:- 23/08/2023	
SUBJECT:- Novel Drug Delivery System		MARKS:- 30	
DURATION:- 60 mins			
<b>Q.01: Multiple Choice Questions</b>		<b>Marks</b>	<b>CO</b>
a)	A lipid bilayer structure that encloses an internal aqueous volume. a. Solid lipid nanoparticles      b. Niosome c. Nanoparticle                      d. Liposome	1	1, 2 3, 4
b)	Which of the following is a non- erodible insert? a. Collagen shield                  b. Minidisc c. Lacrisert                            d. Ocusert	1	
c)	Which of the following does not constitute an appendageal route? a. Stratum corneum                b. Hair follicle c. Sweat gland                        d. Sebaceous gland	1	
d)	Peel adhesion is tested by measuring the force required to pull a single coated tape, applied to a substrate at a .....° angle a. 180°                                  b. 90° c. 360°                                  d. 45°	1	
e)	Which amongst the following are the smallest liposomes? a. Oligolamellar vesicles            b. Large Unilamellar vesicles c. Multilamellar vesicles            d. Multivesicular vesicles	1	
f)	Use of monoclonal antibodies for drug delivery to tumors is a. Passive targeting                  b. Active targeting c. triggerred targeting                d. vector targeting	1	
g)	Which of the following characteristics is suitable for transdermal drug? a. Large drug dose                    b. Large molecular weight c. Drug with narrow therapeutic Index      d. Systemic targeting drugs	1	
h)	A method of permeation enhancement that involves use of charged chemical components across the membrane with use of electric current. a. Sonophoresis                      b. Electrophoresis c. Iontophoresis                      d. Ion exchange	1	
i)	Basic component of liposome include a. Polymer                              b. Surfactant c. Viscosity builder                  d. Phospholipid	1	
j)	Component of transdermal patch that prevents leakage of drug and accepts printing. a. Polymer matrix                    b. Adhesive c. Release liner                        d. Backing membrane	1	
<b>Q.02 : Long answers (Any one)</b>			
a)	Explain transdermal patch components and types.	10	1,4
b)	Discuss various intra-ocular barriers and methods to overcome.	10	1,4
<b>Q.03: Short Answers (Any two)</b>			
a)	Elaborate liposomes, its applications and any one method preparation	5	3
b)	Write a short note on- (any one) A. Ocuserts B. Approaches to increase skin permeation	5	1, 2, 4