



DONE
13/06/14

School of Architecture

School of Engineering & Technology

School of Pharmacy

Knowledge Resource & Relay Centre (KRRC)

AIKTC/KRRC/SoP/ACKN/QUES/2013-14/23

Date: 13/06/14

School: SoP-REV.

Branch: SoP

SEM: VI
2013-14

To,
Exam Controller,
AIKTC, New Panvel.

Dear Sir/Madam,

(Reg.)

Received with thanks the following Semester/Periodic question papers from your exam cell:

Sr. No.	Subject Name	Subject Code	Format		No. of Copies
			SC	HC	
1	Pharmaceutical & Med. Chem. – II			✓	02
2	Pharmaceutics – V			✓	02
3	Pharmacognosy – II			✓	02
4	Cosmeticology			✓	01
5	Pharmacology – III			✓	02
6	Pharmaceutical Analysis – III			✓	02
7	Pharmaceutical Management			✓	02

Note: SC – Softcopy, HC - Hardcopy

Shaheen Ansari

(Shaheen Ansari)
Librarian, AIKTC

AIKTC/KRRC/SoP/ACKN/QUES/2013-14/

Date: _____

- N.B. :** (1) Question No.1 is **compulsory**
(2) Attempt in all **five** questions.
(3) **Figures** to the **right** indicate **full** marks.

1. Write short notes on (any **two**) :- 12
 - (a) National Budget
 - (b) Motivation
 - (c) SWOT Analysis
 - (d) Direct and Indirect Taxes
 - (e) FDA regulations and approvals.
2. (a) What is financial management and explain sources of funds. 4
(b) Distinguish between Sales and Marketing. 3
3. (a) How patents are Influencing in growth pharmaceutical industry ? Give advantages and disadvantages. 4
(b) Explain various pricing policy. 3
4. (a) Explain the concept of 7's. 4
(b) Evaluate the role of a 'Supervisor'. 3
5. (a) Explain marketing mix. How packaging is considered as fifth 'P' of marketing explain. 4
(b) Steps in sales forecasting. 3
6. (a) Discuss the main component of a balance sheet. 4
(b) Difference between Branded and Generic market. 3
7. Write in brief about (any **two**) :- 7
 - (a) New product development
 - (b) Nature of regulated and unregulated market
 - (c) Inventory management.



Pharmacology - III

Sem VI

(2 Hours)

2018-19
QP Code: **BM-10106**

06-5-14

[Total Marks : 40

- N.B.:** (1) Question No. 1 is **compulsory**.
(2) Attempt any **three** questions from the remaining **four** questions.
(3) **Figures** to the **right** indicate **full** marks.

1. Answer any **five** questions. **All** questions carry **equal** marks :— 10
 - (a) Classify anticholinesterases with examples.
 - (b) Nonselective β -blockers should be avoided in diabetic patients. Justify.
 - (c) Explain how ephedrine can relieve nasal congestion.
 - (d) Explain pharmacological action of atropine on eye.
 - (e) Write MOA of Acetazolamide.
 - (f) Write therapeutic uses of succinylcholine.
 - (g) Can anticholinergic drugs be used in glaucoma patients ? Justify.

2. Explain in detail pharmacotherapy of Angina Pectoris. 10

3. (a) Discuss the MOA, adverse effect and therapeutic uses of HMG Co-A reductase inhibitors. 5
(b) Explain the role of Digitalis glycosides in treatment of cardiac failure. 5

4. Classify antiarrhythmic agents. Discuss class IV antiarrhythmic agents in detail. 10

5. Write short note on (any **two**) :— 10
 - (a) Role of diuretics in management of hypertension.
 - (b) Sympatholytic drugs
 - (c) Peripherally acting skeletal muscle relaxants.



(2 Hours)

- N.B.:** (1) Question No.1 is **compulsory**.
 (2) Attempt any **four** questions out of remaining **six** questions.
 (3) Draw neat diagrams wherever **necessary**.
 (4) **Figures** to the **right** indicate **full marks**.

1. (a) Explain the following terms (any five) :— 5
 (i) Transmittance
 (ii) Overtone
 (iii) Supporting Electrolyte
 (iv) Combination Band
 (v) Auxochrome
 (vi) Red shift
 (vii) Triplet state.
- (b) Convert absorbance reading of uv-visible spectrophotometer 0.523 to percent transmittance and convert 75% transmittance to absorbance. 3
2. (a) Draw a block diagram of a fluorimeter. Explain in details role of filters in it. 4
 (b) Discuss amperometric titrations. 4
3. (a) Discuss sample preparations for solids in IR spectroscopy. 4
 (b) Enlist the various light sources used in UV and fluorescence spectroscopic analysis. 4
 Explain in detail any one detector used in Uv-Vis spectroscopy.
4. (a) Draw a neat labelled diagram of dropping mercury electrode and explain the construction and working. 4
 (b) Discuss the various electronic transitions that occur during Uv-visible spectroscopy. 4
5. (a) What is meant by Bathochromic and Hypsochromic shift. 4
 Explain how solvents influences the shift in absorption maxima in uv-visible spectroscopy.
 (b) Draw a polarographic curve and explain various terms involved in it. 4
6. (a) Explain Primary and Secondary coulometric titrations with the help of suitable example. 4
 (b) State Beer-Lambert's Law and give its deviation. 4
7. Write short note on (any two) :— 8
 (a) Ilkovic Equation (b) Difference spectroscopy (c) FTIR



(2 Hours)

[Total Marks : 40]

- N.B. :** (1) Question No. 1 is **compulsory**.
 (2) Answer any **four** questions from remaining questions.
 (3) Draw structures wherever **applicable**.

1. State **True** or **False** and Justify your answer. 8
 - (a) Peanut Oil is adulterated with cotton seed oil.
 - (b) Dextran is a natural gum.
 - (c) Galls gives match stick test positive.
 - (d) Ash Valve indicates the glycosidal content in the drug.
 - (e) Tragacanth gum is usually found in cork cells.
 - (f) Mucilage is present only in the seeds.
 - (g) Mango Kernel oil is used as a substitute for Cocoa butter.
 - (h) Chitin is a polysaccharide of plant origin.

2. (a) Explain the significance of Microbial bioburden in Quality Control of Drugs of Natural Origin. 4
- (b) Write a note on Allium Species. 4

3. (a) Write in detail the method of preparation, chemical constituents and uses of Black Catechu. 4
- (b) Give a detailed account of Gelatin. 4

4. (a) Give biological source, preparation and chemical constituents of Agar. 4
- (b) Discuss the Chemistry of Pyrethrum and Neem. 4

5. (a) Give the biological source, preparation chemical constituents and uses of Linseed Oil. 4
- (b) Write briefly about the following :— 4
 - (i) Thiophene from Tagetes
 - (ii) Protein Hydrolysates.

6. (a) Explain the significance of Lycopodium Spore Method. 4
- (b) Give the biological source chemical constituents and uses of the following :— 4
 - (i) Garcinia
 - (ii) Amla.

7. Write short notes on (any **two**) :— 8
 - (a) Preparation and use of Maize Starch
 - (b) Waxes from Animal Origin
 - (c) Harda.



Sem VIth2013-14
QP Code : BM-1009122-4-14
[Total Marks :40

(2 Hours)

- N.B. :** (1) Question no.1 is **compulsory**.
 (2) Answer any **four** questions from the remaining **six** questions.
 (3) **Figures** to the **right** indicate full marks.

1. Answer the following (any **eight**) 8
 - (a) Write the structure of an amino ketone acting as a local anaesthetic.
 - (b) An antiviral agent which is a purine nucleoside.
 - (c) An antiulcerant agent which is an amino alkyl furan derivative.
 - (d) A nitrosourea used against brain tumors.
 - (e) Against which virus amantadine has antiviral activity.
 - (f) Name the micro organism from which acarbose is obtained.
 - (g) Draw the structure of a pyrazinoyl guanidine diuretic agent.
 - (h) A primary oxidative metabolite of terfenadine.
 - (i) Name the enzyme which converts prednisone to prednisolone.

2. (a) Outline the synthesis of any two of the following with necessary reagents and appropriate reaction conditions:— 6
 - (i) Cimetidine
 - (ii) Furosemide
 - (iii) Methotrexate
- (b) Write the mechanism of action of acyclovir. 2

3. (a) Mention the advantages of the second generation H₁ antagonists over classical antihistamines. Explain with respect to loratidine and cetirizine the structural modifications that led to the preservation of antihistaminic activity while minimizing the CNS effects. 4
- (b) Explain how the pH of the intra cellular and extracellular fluids influences the activity of local anaesthetics. 2
- (c) List the structural requirements for optimal activity in the phenoxy acetic acid class of diuretics. 2

4. (a) What are progestins? Mention any four modifications in the structure of progesterone to decrease the androgenic effects while maintaining the progestational effects. Support your answer with relevant structures. 4
- (b) Draw the structure of a metaglinide oral hypoglycemic agent. Explain their mechanism of action. How do they differ from sulfonyl ureas. 4

Con. 5656-14.



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2.

5. (a) State whether local anaesthetics are weak acids or bases. Write their pka values. 4
 Depict the schematic representation of the binding of an ester type local anaesthetic agent to a receptor site.
- (b) Complete the following reactions:— 2
- $$\text{Cholesterol} \xrightarrow[\text{Oxidation}]{\text{Oppenauer}} \text{A} \xrightarrow{\text{H}_2-\text{Pt}} \text{B}$$
- (c) In the bromination of 3-keto steroids, position entered by bromine atom depends on the configuration at C-5. Explain. 2
6. (a) Depict the activation of an alkylating agent cyclophosphamide with relevant equations. 4
- (b) Discuss the site and mechanism of action of thiazide and thiazide-like diuretics. Why are diuretics in this class referred to as natriuretic or kaliuretic agents. 3
- (c) Benzimidazole proton pump inhibitors are prodrugs. Comment. 1
7. Write short notes on any two of the following:— 8
- (a) Biosynthesis and termination of histamine action.
- (b) Organoplatinum antineoplastic agents.
- (c) Non nucleoside reverse transcriptase inhibitors.

Pharmaceuticals . V

Sem VIth

2018-4
QP Code: **BM-10097**

28-4-14

[Total Marks : 40

(2 Hours)

- N.B.:** (1) Question No. 1 is **compulsory**.
(2) Attempt any **three** questions from the remaining **four** questions.
(3) **Figures** to the **right** indicate **full** marks.
(4) Draw **neat** labelled diagrams wherever **necessary**.

1. Answer any **five** of the following :—

10

- Explain importance of air capacity in tablet coating process.
- Give advantages of coated tablet.
- Give classification of sutures.
- State the role of acid citrate dextrose in blood collection bottles.
- What are ideal plasma substitutes ?
- Define microencapsulation. Enlist its applications in pharmacy.

(a) Describe the steps involved in phase separation coacervation and explain temperature change method. 5

(b) Discuss the extraction of insulin from pancreas of sheep. 5

(a) Discuss the different types of coating pan equipments in tablet coating process. 5

(b) Discuss the preparation and sterilization of catgut. 5

(a) Elaborate on sugar coating process and various film defects of the coated tablets. 5

(b) Write a note on official dextran injections. 5

Write short notes on (any **two**) :—

10

(a) Multiorifice centrifugal process of microencapsulation

(b) Enteric film formers

(c) Official thyroid preparations.



Con. 2140-14.

Cosmetology

QP Code : BM-10100

(2 Hours)

2013-14
15/7/14
| Total Marks : 40

- I.B. (1) Questions No. 1 is compulsory.
 (2) Attempt any three out of the remaining four questions.
 (3) Figures to the right indicate full marks.

Answer in brief :-

10

- (a) State factors that impart a Pearlescent texture to vanishing creams.
 (b) What are the ideal properties of face powders ?
 (c) Give the mechanism of action of Deodorants.
 (d) Write a note on Depilatory formulaions.
 (e) Enlist various classes of colors used in cosmetics alongwith examples.

- (a) Discuss raw materials used in the formulation of Shampoos. 4
 (b) Elaborate on the evaluation of Lipsticks. 4
 (c) Differentiate between Vanishing Cream and Cold Cream. 2

- (a) Explain large scale manufacturing of Toothpastes 4
 (b) Write a note on Hair Colorants. 4
 (c) Define and classify Cosmetics. 2

- (a) Write notes on (any two) :- 8
 (i) Microbial aspects of cosmetics
 (ii) Herbal Cosmetics
 (iii) Sensitization reactions and sensitivity testing of cosmetics.

- (b) Give a brief account of Lather Shaving Cream. 2

- (a) What are the manufacturing requirements for nail lacquer as per Drug and Cosmetics Act ? 2
 (b) Elaborate on the ill effects of sunrays and cosmetics used in protection of the same. 4
 (c) Enlist various eye make products and elaborate on eyeliner. 4