Symbol of Secularism
& National Integration

ANJUMAN-I-ISLAM'S

KALSEKAR TECHNICAL CAMPUS, NEW PANVEL

School of Pharmacy

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

FINAL. Y. B. Pharm. (Semester –VII)
Periodic Test Theory Examination (2016-17)

Subject: Pharmacology III
Marks: 15 M

Date: 21/9/2016
Time: - 12:00 to 1:00 pm

Q1.Answer **any two** [4]

A. Enlist any four treatment options for methanol poisoning.

B. Differentiate between local and general anesthetics.

C. Give mechanism of action of fluoxetine.

Q2. Answer **Any two** [8]

A. Explain the stages of general anesthesia.

B. Define sedative & hypnotics with suitable example. Give mechanism of action and therapeutic uses of benzodiazepins.

C. Explain pharmacological action and adverse effect of morphine.

Q.3 Write a short note on **Any one** [3]

A. Classify antidepressants. Give therapeutic uses of antidepressants.

B. Give mechanism of action and Pharmacology of Lithium.

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Fr. Y. B. Pharm. (Semester –VII)

Periodic Theory Examination, 2016 (CBSGS)

Subject: P'ceutical Chemistry-III **Date:19.9.16**
Time: - 12.00pm -1.00pm **Total Marks: 15M**

Q1. Answer the following (Any 3) **3M**

a) Name the enzyme that is main target of cardiac glycosides.
b) The reaction between methyl acetoacetate and o-nitrobenzaldehyde is first step of which drug.
c) How is quinine and quinidine is related stereochemically?
d) Name any drug that is used for treatment of breast cancer.

Q2. Give drug combination used for antiviral therapy along with structure. **2M**

OR

Enalapril is prodrug. What is active form of the drug? (Draw structures involved)Which is the enzyme that it inhibits?

Q3. List agents (with structures) that block de novo synthesis of DNA and explain their role in treatment of cancer.

OR

With regard to SAR of thiazide diuretics, state which statement is whether true or false. Correct those which are false. **3M**

a) Electron relesing group at 6th position is necessary.
b) Saturation of double bond at 3-4 position produces diuretic activity 10 fold more active than unsaturated
c) Substitution with lipiphilic group at C-3, gives marked increase in potency.

Q4. Outline synthesis of **(Any 2)** **3M**

1) Chlorombucil 2) Nifedipine 3) Furosemide 4) Amantadine

Q5. Draw structure of following antiarrhythmic agents and state to which class they belong **2M**

1) 4-amino-N-[2-(diethylamino)ethyl)]benzamide
2) 1-(1-methylethylamino)-3-(1-naphthyloxy)-propan-2-ol.

OR

Explain mechanism of action of Procarbazine.

Q6. Justify Daunorubicin causes cardiotoxicity. **2M**

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Final. Y. B. Pharm. CBSGS (Semester –VII)
Periodic theory Examination (2016 – 2017)

Subject: Pharmaceutics IV **Date: - 22/09/ 2016**
Marks: 15 M **Time: -12.00 -1.00p.m**

Q.No.1. a) Write the advantages of LAL test compared to the Shams test. (2M)

OR

Discuss various vehicles used in parenterals with their specifications.

b) Give Arrhenius equation. Write the steps for detection of shelf life based on Arrhenius equation. (3M)

Q. No. 2. a) Give an account on lyophilization. (2M)

OR

Enlist quality control tests for plastic. Give an account on Water vapour permeability test

b) Write a note on hydrolytic degradation pathway for drug with the methods to enhance stability by overcoming the same. (3M)

Q. No. 3. a) Write a note on ICH guidelines (5M)

OR

a) Discuss formulation consideration for small volume parenterals.

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CBSGS
Final Y. B. Pharm. (Semester –VII)
Periodic Theory Examination (2016 – 2017)

Subject: Pharmacognosy & Phytochemistry II **Date: - 23/09/ 2016**

Marks: 15 M **Time: -12.00 p.m. - 1.00 p.m.**

Note - All questions are compulsory
Draw structures wherever necessary

Q.1 Attempt **Any Five**

a) Give merits and Demerits of Natural Pesticides **1 M**

b) Write biological source and use of drug answering Van Erks test **1 M**

c) Give biological source of anthraquinone glycoside obtained from Animal source **1 M**

d) Give biological source of oil used as cathartic and give its major fatty acid **1 M**

e) Give biological source and use of an alkaloid derived from Histidine **1 M**

f) Discuss *Life cycle of* ***Ergot*** **1M**

Q. 2 Discuss in detail the complete pharmacognosy of ***Aloes or Linseed*** **4 M**

Q. 3 Give biological source, chemical constituents, method of preparation and uses of Following Drugs **2 M**

a. Olive

b. Jojoba

Q. 4 Give a biogenesis pathway for Quinine alkaloids and write biological source, chemical Constituents and uses of ***Cinchona*** **4 M**

Or Give biogenesis of **Amygdaline** and write note on ***Bitter almond***

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Final. Y. B. Pharm. (Semester –VII) CBSGS
Periodic Theory Examination

Subject: Pharm Analysis III — Date:- 20-09-2016
Marks: 15 — Time:- 12.00pm – 01.00pm

Questions

1. **A) Define the following term** **[6 x 0.5 = 3 Marks]**
   i) Capacity Factor ii) Tailing Factor iii) Isocratic Elution
   iv) Resolution v) 2-Dimensional TLC vi) Destructive Detecting Agents

2. **A) Justify your answer with proper examples (Any TWO)** **[2 x 1 = 2 Marks]**
   i) Analyte of interest in a Non-Polar compound. Select a suitable phase for separation and justify it.
   ii) UV-Visible detectors **CAN'T** be used for *Absorption ration method* in HPLC. Justify TRUE or FALSE.
   iii) KCl can be used as an agent for elution in Anion exchange chromatography in separation of proteins?

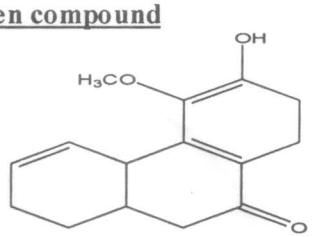
   B) A chromatogram of a mixture A and B provided the following data on a 25 cm column, whose Non-retained time is 0.9 (min), Retention time of both A and B, is 5.20, 5.09 and Peak width 2.81 and 2.92. Calculate the **Resolution factor of A & B** and **Number of theoretical plates** **[2 Marks]**

2. **Explain in detail** **[2 x3 = 6 Marks]**
   i) Different mode of Elution techniques used in HPLC, explain in detail Rheodyne injector with proper diagram? **(OR)**
   i) Different types of detectors used in Gas Chromatography and explain in detail about detector used for Organic compounds?

   ii) Explain the Principle of Ion-Pair chromatography. Discuss any two application of the same? **(OR)**
   ii) A compound $C_6H_{13}O_2N$ has the following spectral characteristics, deduce the structure and justify your answer:-

   IR :- 1748 cm^{-1},1235 cm^{-1},
   ^1H NMR :- 2.1 (δ,singlet 3H) 2.2 (δ,singlet 6H)
   2.45 (δ, triplet 2H) 4.05 (δ, triplet 2H)

3. **Determine the λmax of the given compound** **[2 Marks]**



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