To,
Exam Controller,
AIKTC, New Panvel.

Dear Sir/Madam,

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

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Subject Name</th>
<th>Subject Code</th>
<th>Format</th>
<th>No. of Copies</th>
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<tbody>
<tr>
<td>1</td>
<td>Pharmaceutical Chemistry – III</td>
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<td>Pharmaceutical Analysis – III</td>
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<td>Pharmacology – III</td>
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<td>4</td>
<td>Pharmaceutics – IV</td>
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<td>5</td>
<td>Pharmacognosy &amp; Phytochemistry – II</td>
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<td>6</td>
<td>Pharmaceutical Jurisprudence / Forensic Pharmacy</td>
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Note: SC – Softcopy, HC - Hardcopy

(Shaheen Ansari)
Librarian, AIKTC
Fr. Y. B. Pharm. (Semester – VII)

Periodic Theory Examination, 2015 (CBSGS)

Subject: Pharmaceutical Chemistry-III

Date: 7.9.15

Time: 11.00pm - 12.00pm

Total Marks: 15M

Q1. Draw neat structure and therapeutic use of following (Any 3) 3M
   I) 1,4-dihydro-2,6-dimethyl-4-(2-nitrophenyl)-3,5-pyridinedicarboxylated dimethyl ester
   II) 2',3'-dideoxy-2',3'-didehydrothymidine
   III) Alkylating anticancer causing nephrotoxicity
   IV) Neuroaminidase inhibitors
   V) Digitexose containing cardiac glycoside

Q2. Justify Cardiotoxicity occurs in cancer patients administering antibiotics.
   OR
   Justify Nephrotoxicity of organoplatinum complexes is treated with sodium thiosulphate. 2M

Q3. Give an account on bonding interaction of Imatinib OR Methotrexate with the receptor. 2M

Q4. Give the systematic synthesis of any 2 with reactants and reaction conditions for each step 4M
   I) Azidothymidine
   II) Chlorambucil
   III) Amantadine
   IV) Methotrexate

Q5. Comment on SAR of cardiac glycoside. 2M
   OR
   Comment on SAR of daunorubicin in cancer therapy.

Q6. Explain mechanism of action of calcium channel blockers. 2M
   OR
   Explain mechanism of action of Acyclovir
1. **A) Define the following term (any TWO)**
   
   i) Capacity Factor
   
   ii) Coupling constant
   
   iii) Destructive Detecting Agents
   
   **B) Justify your answer with proper examples**
   
   i) Analyte of interest in an Polar compound. Select a suitable phase for separation and justify it.
   
   ii) Flame ionisation detector is an ideal detector for Inorganic compound in GC chromatography?
   
   iii) KCl can be used as an agent for elution in Anion exchange chromatography in separation of proteins?

2. **A) Explain in detail (any Two)**

   i) Different mode of Elution techniques used in HPLC, explain in detail Rheodyne injector with proper diagram?
   
   ii) Different types of detectors used in Gas Chromatography and explain in detail about detector used for Halides compounds?
   
   iii) Explain any ONE bulk property detector for HPLC with diagram?

   **B) Depict Signals, Peaks and Spin-Spin splitting of H-NMR for the following:**

   A)
   
   ![Signal A](image)

   B)
   
   ![Signal B](image)

3. **A) Explain in detail about (any Two)**

   i) Classify chromatography system schematically. Explain in detail about FOUR factors affecting resolution of TLC
   
   ii) Give eight advantages and one disadvantage of HPTLC over TLC.
   
   iii) Enlist different pumps used in HPLC. Describe any two pumps in details with diagram

   **B) Do as directed**

   i) Draw a block diagram depicting the instrumentation for HPLC.
   
   ii) Two solvent system used in H-NMR
(Revised Syllabus)
Final Y. B. Pharm. (Semester – VII)
Reperiodic Theory Examination (2015 – 2016)

Subject: Pharmacognosy III
Date: - 25/08/ 2015

Marks: 10 M
Time: -11.00 a.m -12.00 p.m

Note - All questions are compulsory
Draw structures wherever necessary

Q. 1 Give biogenetic pathway for Quinine 2 M
Q. 2 Discuss in detail the complete pharmacognosy of Vasaka or Rauwolfia 3 M
Q. 3 Write short note on [Any One] 1 M
   a. Life cycle of Ergot
   b. Tea
Q. 4 Give biological source, chemical constituents and uses of Any two drug 4 M
   a. Ephedra
   b. Ipecac
   c. Vinca
   d. Ashwagandha
Q1. Answer any two [4]
   A. Justify the combination of L dopa with carbidopa in the treatment of Parkinsonism.
   B. Give Mechanism of action of Phenytoin
   C. Explain various plains of surgical anesthesia

Q2. Answer Any two [8]
   A. Write a short note on preanesthetic medications
   B. Discuss Pharmacotherapy of alzheimer disease.
   C. Discuss MOA and Pharmacological action of Benzodiazepines

Q3. Write a short note on Any one [3]
   A. SSRI
   B. Adverse effects of chlorpromazin
Subject: Pharmacology III

Marks: 15 M

Date:

Time: 1:00-2:00 pm

Q1. Answer any two

A. Enumerate therapeutic uses of Benzodiazepine.
B. Describe various types of epileptic seizures.
C. Define sedative and hypnotics with one example of each.

Q2. Answer Any two

A. Explain the stages of general anesthesia.
B. Discuss the symptoms and treatment of methanol poisoning.
C. Explain Pharmacology and adverse effects of L-dopa.

Q3. Write a short note on Any one

A. MAOI in a treatment of Parkinsonism
B. Phenytoin
Note: 1) All questions are compulsory
2) Draw neat labelled diagram wherever necessary

Questions

Q. 1. a) Give an account on vehicles used in sterile preparations 3 MKS

OR

a) What are pyrogens. Discuss methods of depyrogenation 3 MKS
b) Write a note on corneal bioavailability 2 MKS

Q. 2. a) Write a note on glass as material for containers 2 MKS

b) What is BFS technique in ophthalmic preparation 1 MK
c) Write a note on evaluation of collapsible ointment tube 2 MKS

OR

c) Give an account on quaternary ammonium compound as a preservative 2 MKS

Q. 3. a) Write notes on (Any 2) 4 MKS

i) Laminar flow environment
ii) Suspensions as injections
iii) Membrane filters

b) Define clean room “Class 100” 1 MK
CBSGS
Final Y. B. Pharm. (Semester -VII)
Periodic Theory Examination (2015 – 2016)
Subject: Pharmacognosy & Phytochemistry II
Date: -28/08/2015
Marks: 15 M
Time: -11.00 a.m -12.00 p.m

Note - All questions are compulsory
Draw structures wherever necessary

Q. 1 Give biogenetic pathway for Quinine 2 M
Q. 2 Discuss in detail the complete pharmacognosy of Cinchona or Nuxvomica 4 M
Q. 3 Write short note on [Any One]  2 M
   a. Life cycle of Ergot
   b. Curare
Q. 4 Give a biogenesis pathway for tropane alkaloids and write biological source, chemical constituents and uses of any one drug containing tropane alkaloids. 4 M
Q. 5 Give biological source, chemical constituents and uses of Any two drugs  3 M
   a. Cocoa
   b. Tea
   c. Ephedra
   d. Opium
Q. 1 Give biogenetic pathway for Emetine  
Q. 2 Discuss in detail the complete pharmacognosy of Ashwagandha or Ephedra  
Q. 3 Write short note on [Any One]  
   a. Pilocarpus  
   b. Ipecac  
Q. 4 Give a general extraction process and chemical tests for alkaloids and write biological source, chemical constituents and uses of any one drug containing steroidal alkaloids.  
Q. 5 Give biological source, chemical constituents and uses of Any two drugs  
   a. Coca  
   b. Coffee  
   c. Pepper  
   d. Opium
<table>
<thead>
<tr>
<th>Questions</th>
<th>Marks</th>
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<tbody>
<tr>
<td><strong>[Q.1] DEFINE: [ANY 4]</strong></td>
<td>[4M]</td>
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<tr>
<td>1. Opium derivative</td>
<td></td>
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<td>2. Invention</td>
<td></td>
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<td>3. Displaced person</td>
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<td>4. Coca leaf</td>
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<td>5. Patent and proprietary medicine</td>
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<td>6. New drug</td>
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<td>7. Repacking of drugs</td>
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<td><strong>[Q.2] STATE THE SIGNIFICANCE OF FOLLOWING SCHEDULES: [ANY 4]</strong></td>
<td>[2M]</td>
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<tr>
<td>1. Schedule H</td>
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<td>2. Schedule W</td>
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<td>3. Schedule FF</td>
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<td>4. Schedule S</td>
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<td>5. Schedule D</td>
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<td>6. Schedule U</td>
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<td><strong>[Q.3] WRITE SHORT NOTES ON: [ANY 3]</strong></td>
<td>[6M]</td>
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<tr>
<td>1. Functions of Central Drug Laboratory</td>
<td></td>
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<tr>
<td>2. Duties of drug inspector in relation to manufacture of drugs and cosmetics</td>
<td></td>
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<tr>
<td>3. Recommendations of Drug enquiry committee</td>
<td></td>
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<tr>
<td>4. Conditions of import license</td>
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<tr>
<td><strong>[Q.4] ANSWER THE FOLLOWING:</strong></td>
<td>[3M]</td>
</tr>
<tr>
<td>1. Preparation of first register of Pharmacist prepared in every state? Write qualification of registration</td>
<td></td>
</tr>
<tr>
<td>2. Define Intellectual property right? Enlist different forms of IPR.</td>
<td></td>
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</tbody>
</table>
Questions

[Q.1] DEFINE: [ANY 2]
1. Inventive step
2. Displaced person
3. First register

[Q.2] STATE THE SIGNIFICANCE OF FOLLOWING SCHEDULES: [ANY 4]
1. Schedule G
2. Schedule T
3. Schedule F
4. Schedule Y
5. Schedule B
6. Schedule M

[Q.3] WRITE SHORT NOTES ON: [ANY 3]
1. Duties of drug inspector in relation to sale of drugs and cosmetics
2. Terms of references of Chopra Committee
3. Conditions of import license
4. Types of manufacturing licences

[Q.4] ANSWER THE FOLLOWING: [4M]
1. State the provisions under pharmacy act for removal of names from register
2. Write the procedure for the grant of patent.

[Q.5] DEFINE FOLLOWING TERMS: [ANY 3]
1. Drug
2. Loan license
3. New drug

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Subject: FORENSIC PHARMACY
Date: - 12/9/2015
Time: - 1-2 P.M

Marks: 15 M

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