To,
Exam Controller,
AIKTC, New Panvel.

Dear Sir/Madam,

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

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Note: SC – Softcopy, HC - Hardcopy

(Shaheen Ansari)
Librarian, AIKTC
Subject: Pharmaceutical Management

Date: - 11/9/15
Time: - 11-12 PM

1. What are different components of healthcare industry? List areas of growth in Indian healthcare industry [2M]

OR

1. Briefly describe the SWOT analysis of Indian Pharmaceutical industry

2. Briefly describe the different types of capital needed for company [2M]

3. Describe different ways to segment market with examples. [3M]

4. What are the different techniques used for financial control? Describe different parts of Balance Sheet. [3M]

OR

4. Define Brand. What is the role of brand for companies? What can be branded with examples?

5. Describe in Short (ANY ONE) [5M]

a. SWOT analysis

b. Different stages in PLC and strategies taken in each stage
Subject: Pharmacology II
Marks: 15 M

Date: - 10/9/2015
Time: - 11.00 am-12.00 pm

All Questions are compulsory

Q.1: State whether the following statements are true/false and justify your answer

(ANY FOUR) (4 Marks)

a. Use of Propylthiouracil should be minimized in pregnancy.

b. Sulfonylureas can be given to obese patients.

c. Oxytocin may be given at the beginning of the third stage of labour.

d. Combination of calcium should be avoided with vit D in the treatment of osteoporosis.

e. Moxifloxacin can be safely given to cardiac patients.

Q.2: Give mechanism of actions of following. (ANY TWO) (4 Marks)

i. Oxytocin & Ergot alkaloids

ii. Vitamin D & Bisphosphonates

iii. Sulfonylureas & Biguanides

Q.3: (ANSWER ANY TWO) (4 Marks)

i. Short note on genetic basis of resistance

ii. Rational for combining sulphonamides with trimethoprim

iii. Mechanism of action of penicillin

Q.4: (ANSWER ANY ONE) (3 Marks)

i. Short note on tetracyclines

ii. Classify Cephalosporins. Describe their anti-bacterial spectrum and mechanism of action

***************
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5. Describe in Short (ANY ONE) [5M]

   a. SWOT analysis

   b. Different stages in PLC and strategies taken in each stage
Note
(1) All Question are Compulsary
(2) Draw diagram wherever necessary

1. Discuss with suitable diagram design of fermenter  (3M)

2. Explain Microbiological assay and enlist its method  (2M)

3. Differentiate between microinjection and embryonic stem cell method of
transgenic animals.  (1.5M)

4. Explain any method of DNA sequencing  (3M)

5. Draw labelled diagram of PCR  (2.5M)

6. Classify immobilization method and explain any one in detail (3M)
Subject: COSMETICS
Marks: 15 M

Date: - 8/9/15
Time: - 11-12

Questions

Q.1] Name the following: [Any 4]  
   a. Type of patch test used for shampoos and hair dyes.  
   b. Maximum percentage of beeswax used in cold cream.  
   c. Physical sun screening agent.  
   d. Cream used as base for foundation make-up  
   e. Water soluble preservative used in cosmetics.

   Marks
   [2M]

Q 2] Classify colorants used in cosmetics? Give methods to evaluate colored cosmetic products?  

   OR

Q 2] Classify skin creams. Differentiate between cold cream and vanishing cream.

Q 3] Explain functional evaluation tests for sunscreens cream.  

Q 4] Discuss sources of microbial contamination and methods to prevent those

   OR

Q. 4] What are preservatives? Describe the factors affecting efficacy of anti- microbial ?

Q 5] Classify and explain patch test for sensitivity testing of cosmetics.  

   Marks
   [4M]

   [3M]

   [3M]

   [3M]
1. Define pericyclic reaction. Enlist the types of pericyclic reaction. [2M]

2. Describe electrocyclic reaction with suitable example. [3M]

3. Write a note on Diel’s Alder cycloaddition reaction. [2M]

4. Write any two methods of synthesis of Furan [2M]

5. Write a note on any one of the following [2M]
   - Paal Knor synthesis of pyrrole
   - Hinsberg synthesis of thiophene

6. Predict the product (any two) [4M]

A) \[ \text{H}_2\text{C} \begin{array}{c} \text{O} \\ \text{O} \end{array} \text{CH}_3 \rightarrow \text{P}_2\text{O}_5 \]

\[ 140-150^\circ \text{C} \rightarrow \text{-H}_2\text{O} \]

B) \[ \text{(CH}_3\text{CO}_2\text{O)}_2\text{O, BF}_3 \]

C) \[ \text{N} \begin{array}{c} \text{CH}_3 \\ \text{H} \end{array} + \text{Ar B (OH)}_2 \rightarrow \text{CU (OAC)}_2 \]

pyridine