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B.Pharm
15PH804

8th Semester Regular Examination 2018-19
CLINICAL PHARMACY & PHARMACOVIGILANCE
BRANCH : B.Pharma
Max Marks : 100
Time : 3 Hours
Q.CODE : F120

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.
The figures in the right hand margin indicate marks.

Part- I

Q1 **Only Short Answer Type Questions (Answer All-10)** **(2 x 10)**

a) Write the definition of Clinical Pharmacy.
b) Write any two formulas for calculating Pediatric dose.
c) Mention the normal values and its significance of any two Hematological tests.
d) What happens when Tetracycline and milk are given together?
e) Name few drugs which should not be administered in renal failure patients & why?
f) State reasons behind irrational use of drugs.
g) Give two examples of Drug-drug interaction.
h) What are the different types of Adverse drug reaction?
i) What do you mean by patient medication history?
j) State the normal values of different electrolytes.

Part- II

Q2 **Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)** **(6 x 8)**

a) Explain how Therapeutic drug monitoring helps in better patient care.
b) Name the different hematological tests used in evaluation of disease state.
c) Explain Drug information services.
d) Justify the role of determination of clearance of drug in clinical pharmacy.
e) Explain the Pharmacodynamic aspect of drug interaction.
f) Write notes on the role of pharmacist in rational drug use.
g) Justify the need for dose adjustments for geriatric patents.
h) What are the duties of a Clinical pharmacist towards ward round participation?
i) Describe the significance of 'Half-Life' in clinical pharmacy.
j) Design the drug dosing in details in renal failure patients.
k) Illustrate about the different tests used in Thyroid profile.
l) Elucidate the various aspects of patient counseling.

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Q3 Discuss the various aspects of Clinical pharmacy and write about the roles of a Clinical pharmacist. **(16)**

Q4 Define and describe Drug Interaction specially focusing on Pharmacokinetic interaction with suitable examples. **(16)**

Q5 Discuss the concept of Pharmacovigilance elaborately. **(16)**

Q6 Classify different clinical laboratory tests used in cardiac and renal disorders. **(16)**

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15PH805.E.3

8th Semester Regular Examination 2018-19

DRUG DISCOVERY & DEVELOPMENT

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q.CODE : F109

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

The figures in the right hand margin indicate marks.

Part- I

Q1 **Only Short Answer Type Questions (Answer All-10)** **(2 x 10)**

a) Explain why -NH_2 is considered as an isostere of –OH or vice versa?

b) Name one five-membered heterocyclic ring which is considered as a non-classical isostere of –COOH group and remained most effective in drug discovery.

c) A drug ionizes to 50% at pH 2.3. Calculate its pKa and state whether the drug is acidic or basic.

d) Write the chemical nature of bead, solid support and Linkers in combinatorial chemistry.

e) Name four commercial/non-commercial databases of available compounds for virtual screening.

f) Write the significance of Molar refractivity in Drug Design.

g) How does an MD simulation works?

h) Name the different steps for non-hydrated docking of a ligand into a protein active site.

i) Write the three main aspects of Pharmacophore mapping.

j) Explain in which method of synthesis you will get higher yield of product- consecutive or convergent type.

Part- II

Q2 **Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)** **(6 x 8)**

a) Derive Hansch Equation.

b) Explain the different favorable and unfavorable forces involved in drug-receptor binding interaction.

c) Define and classify Bioisosteres with examples.

d) Justify how Craig plot helps you to identify the substituents that are particularly responsible for +ve π and σ parameters, –ve π and σ parameters, and one +ve and one –ve parameter.

e) Analyze Free-Wilson approach.

f) Distinguish between Multi-pin methodology and tea bag methodology in parallel solid phase library design.

g) Distinguish between solid phase synthesis and solution phase synthesis.

h) Justify which methods are suitable for which cases-

i) Target based virtual screening

ii) Pharmacophore-based virtual screening.

i) Differentiate between Consecutive and Convergent synthesis.

j) Differentiate Between CoMFA and CoMSIA.

k) Differentiate between Monte Carlo and Metropolis algorithm used in MD simulation

l) Explain the working of tyrosine kinase receptors.

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Q3 What should De Novo ligand design software do? What are the different classes of ligand design methods? **(16)**

Q4 Explain the various strategic approaches developed in retrosynthesis. **(16)**

Q5 Explain the method of combinatorial lead optimization of dihydrofolate reductase inhibitors. **(16)**

Q6 Write a note on various physicochemical factors affecting drug action. **(16)**

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15PH805.E.4

8th Semester Regular Examination 2018-19

HERBAL DRUG TECHNOLOGY

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q.CODE : F110

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

The figures in the right hand margin indicate marks.

Part- I

Q1 **Only Short Answer Type Questions (Answer All-10)** **(2 x 10)**

a) What is healing agent? Write examples of it.
b) Define conventional drugs with suitable examples.
c) How the herbal drugs are safety? Justify it with suitable example.
d) Write the definition of herbal drug.
e) State the definition of nutraceuticals.
f) What is ash value?
g) Write the definition of herbal cosmetics.
h) What are the different examples of herbal medicines used in diarrhea?
i) Define the term “Quality Control” and “Quality Assurance”.
j) Enumerate the term “Patent”.

Part- II

Q2 **Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)** **(6 x 8)**

a) Differentiate herbal verses conventional drugs with suitable examples.
b) Explain the analytical profile of Aegle marmelos.
c) Illustrate the importance of herbal therapies.
d) Write down the methods used for determination of extractive value.
e) Describe about herbal toxicity and their interactions.
f) What are the benefits of patent protection?
g) Write the classification of herbal nutraceuticals with suitable examples.
h) Write notes on patent application.
i) Explain the preparation methods and uses of herbal medicines against skin infections.
j) Write the procedure for determination of pesticide residue for quality control of herbal drugs.
k) Explain intellectual property rights with special reference to phytoconstituents.
l) Develop the method for determination of tannins from tannin containing drugs.

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Q3 Describe the different parameters for quality control and quality assurance of herbal ingredients as per WHO guidelines. **(16)**

Q4 Explain the preparation of any two numbers of herbal medicines used in the treatment of cold. **(16)**

Q5 Discuss the various advantages of herbal cosmetics. Write some examples of herbs used in the preparation of herbal cosmetics. **(16)**

Q6 Enumerate the detail analytical profile of Brahmi and Gymnema sylvestre. **(16)**

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PH.8.5

8th Semester Back Examination 2018-19
PHARMACEUTICAL MANAGEMENT
BRANCH : B.Pharma
Time : 3 Hours
Max Marks : 70
Q.CODE : F195

Answer Question No.1 which is compulsory and any FIVE from the rest.
The figures in the right hand margin indicate marks.

Q1 **Answer the following questions :** **(2 x 10)**

a) What is the role of reference check in recruitment process?
b) What do you understand by pharmaceutical marketing?
c) What is delegation of authority in Management?
d) What is a bank reconciliation statement?
e) 360 degree appraisal is conducted for the promotion to top management. Is it true?
f) What do you mean by book keeping in accounting?
g) What do you understand by the term target market?
h) What is motivation?
i) What is survey method in demand forecasting?
j) How packaging is important aspect of pharmaceutical product management?

Q2 **a)** Briefly explain AIDAS formula. **(5)**
b) Explain different levels of management and their area of responsibility. **(5)**

Q3 **a)** How a leader is different from a manager. **(5)**
b) What is plant layout and its objectives? **(5)**

Q4 **a)** Briefly discuss scientific management theory by FW table. **(5)**
b) Write a short note on inventory control. **(5)**

Q5 **a)** Distinguish between journal and ledger. **(5)**
b) Explain different personal qualities of a pharmacist. **(5)**

Q6 Describe performance evaluation techniques. **(10)**

Q7 Briefly discuss inventory control technique. **(10)**

Q8 **Write short answer on any TWO :** **(5 x 2)**

a) Demand curve.
b) Communication process.
c) Staffing functions.

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15PH802

8th Semester Regular Examination 2018-19

PHARM.MANAGEMENT

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q.CODE : F119

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

The figures in the right hand margin indicate marks.

Part- I

Q1 **Only Short Answer Type Questions (Answer All-10)** **(2 x 10)**

a) What is Industrial Marketing?
b) What is Consumerism?
c) What is the role of reference check in recruitment process?
d) What is pharmaceutical marketing?
e) What is delegation of authority in management?
f) What is Bank reconciliation statement?
g) 360° appraisal is conducted for the promotion to top management position. Is it true?
h) What do you mean by book keeping in accounting?
i) What is the survey method of demand forecasting technique?
j) What do you understand by the term target market?

Part- II

Q2 **Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)** **(6 x 8)**

a) Briefly explain the AIDAS formula.
b) Distinguish between vertical and horizontal marketing system
c) Write a short note on Global Marketing.
d) Explain the different levels of Management & the responsibility they take in organization.
e) Distinguish between leader and Manager.
f) Briefly explain the Scientific Management theory.
g) What are plant layout & factory layout and its objectives?
h) Briefly explain the communication process.
i) Distinguish between journal & ledger.
j) Write a short note on inventory control.
k) Explain different qualities of a pharmacist.
l) What is a demand curve & why does it slopes downward?

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Q3 Briefly discuss administrative functions of management starting from planning and ending in controlling. **(16)**

Q4 Briefly discuss the traditional and contemporary techniques of inventory control. **(16)**

Q5 Describe the performance evaluation process,along with its techniques. **(16)**

Q6 Briefly explain different distribution channels with special reference to importance of retail industry in pharama business. **(16)**

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PH.8.4

8th Semester Back Examination 2018-19
QUALITY ASSURANCE AND GMP
BRANCH : B.Pharma
Time : 3 Hours
Max Marks : 70
Q.CODE : F102

Answer Question No.1 which is compulsory and any FIVE from the rest.
The figures in the right hand margin indicate marks.

Q1 **Answer the following questions :** **(2 x 10)**

a) State the terms Quality control and Quality assurance?
b) Determine the various analytical validation parameters?
c) Write the criteria of Quality policy for an organization?
d) How the cleaning and sanitation maintenance of the premises and personnel is done?
e) Why warehousing practices are followed in the storage of materials and products?
f) Determine the role of HVAC system in the environment control?
g) State the terms Efficiency and Effectiveness?
h) Write the types of process validation and its importance?
i) Write the responsibilities and qualification of personnel?
j) State the terms MFR and BMR?

Q2 **a)** Explain the role of drug regulatory authorities as per Indian constitution? **(5)**
b) Design the various features and guidelines of ICH? Write its significance. **(5)**

Q3 **a)** Explain in brief the product recall procedures? **(5)**
b) Analyze the types of complaints? How the complaints can be handled? **(5)**

Q4 **a)** Explain the guidelines for selection and procurement of equipments? **(5)**
b) Analyze briefly the various features of production control? **(5)**

Q5 **a)** Illustrate the process validation parameters for oral & liquid formulations? **(5)**
b) Design the organizational layout of a pharmaceutical plant with various features? **(5)**

Q6 Discuss the benefits, certification, elements and various standards of ISO? **(10)**

Q7 Describe the features of GMP and cGMP as per drugs and cosmetics act & rules? **(10)**

Q8 **Write short answer on any TWO :** **(5 x 2)**

a) Total Quality Management
b) Standard Operating Procedure
c) Quality Audit

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