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**B.Pharm
15PH801**

8th Semester Regular Examination 2018-19
PHARMACEUTICS-IV(PHARMACEUTICAL TECHNOLOGY-III)
BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q.CODE : F114

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)

- Write very briefly about the objectives of preformulation.
- Define partition coefficient.
- Differentiate between Carr's index and Hausner ratio
- Describe very briefly about the role of particle size analysis in preformulation study
- Write the advantages of controlled release drug delivery system.
- State the types of biocompatible carriers used for targeted drug delivery system.
- Define the potential advantages of liposome.
- State GRDDS; mention its importance.
- Define the term repeat action tablets
- Write about Transdermal Drug Delivery System, mention the types.

Part- II

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

- Explain the role of different spectroscopic methods in preformulation study
- Discuss about intrinsic solubility.
- Mention how polymorphism is related in formulation development.
- What is Pka, describe its role in solubility study.
- Classify oral controlled release drug delivery system.
- Differentiate between liposome and nanoparticles
- Explain briefly about Occusert
- Classify the types of IUD, mention the formulation of each type.
- Mention the different types of biodegradable polymer used for Colon Targeted Drug Delivery
- Discuss about various approaches used for gastro retention.
- Write the advantages of erythrocyte as drug carrier.
- Mention the evaluation process of transdermal drug delivery system.

Part-III

Q3 Only Long Answer Type Questions (Answer Any Two out of Four) (16)
Describe the protocol used to perform preformulation study. Discuss briefly various physicochemical properties which are determined prior to formulation.

Q4 (16)
Describe the Physicochemical and Pharmacokinetic characteristics of a drug ideally suited for designing controlled release dosage form.

Q5 (16)
Write basic principle and formulation of Alzet with proper diagram.

Q6 (16)
Mention the parameters responsible for powder flow properties in design of an appropriate formulation.

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**B.Pharm
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 pharma business. **(16)**

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B.Pharm
15PH803

8th Semester Regular Examination 2018-19

QUALITY ASSURANCE & GMP

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q.CODE : F101

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)

- State the contents of validation protocol in brief?
- Create a fishbone diagram for process characterization study showing cause- effect relationship?
- Derive the features for ware housing operations?
- Write the various audit methods for conducting audit activities?
- Why WHO GMPs guidelines required in quality control department?
- What are the factors affecting degradation of the products? Explain.
- Determine the basic elements of SOP? Suggest the need for SOP.
- How the complaints can be handled? Explain.
- Write the types of pre-requisites qualification of process validation?
- What is line clearance? Write the packaging and labelling instructions?

Part- II

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

- Distinguish between GMP and cGMP? Explain briefly the protocol for various activities?
- Explain briefly the responsibilities and qualification of personnel?
- Design the objective, guidelines and procedures for product recall?
- Explain in brief the cleaning validation procedures and the controlling measures for sanitation maintenance?
- Justify the significance of analytical validation methods for the specifications of the product?
- Explain in brief the standard operating procedures for Dissolution apparatus & PH meter?
- What is GLP? Analyze the principles and features of the practices in various laboratories?
- Design the construction and layout of the organization with reference to the quality assurance system?
- Explain the objectives and principles approaches for the audit activities?
- Formulate the types of process validation approaches? Explain.
- Analyze the documentation features for quality assurance specification?
- Explain the monitoring features of regulatory agencies for marketing the product?

Part-III

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

- Q3** Discuss the salient features and guidelines of GMP and cGMP? **(16)**
- Q4** Discuss Quality audit with suitable examples? Describe briefly the audit life cycle? **(16)**
- Q5** Describe the validation of water system for sterile and non-sterile products? Give examples. **(16)**
- Q6** Discuss the standard operating procedures for UV spectrophotometer and HPLC? Write the significance? **(16)**

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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)

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

- Explain how Therapeutic drug monitoring helps in better patient care.
- Name the different hematological tests used in evaluation of disease state.
- Explain Drug information services.
- Justify the role of determination of clearance of drug in clinical pharmacy.
- Explain the Pharmacodynamic aspect of drug interaction.
- Write notes on the role of pharmacist in rational drug use.
- Justify the need for dose adjustments for geriatric patients.
- What are the duties of a Clinical pharmacist towards ward round participation?
- Describe the significance of 'Half-Life' in clinical pharmacy.
- Design the drug dosing in details in renal failure patients.
- Illustrate about the different tests used in Thyroid profile.
- 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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B.Pharm
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)

- What is healing agent? Write examples of it.
- Define conventional drugs with suitable examples.
- How the herbal drugs are safety? Justify it with suitable example.
- Write the definition of herbal drug.
- State the definition of nutraceuticals.
- What is ash value?
- Write the definition of herbal cosmetics.
- What are the different examples of herbal medicines used in diarrhea?
- Define the term "Quality Control" and "Quality Assurance".
- Enumerate the term "Patent".

Part- II

Q2 Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)

(6 x 8)

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

Part-III

Q3 Only Long Answer Type Questions (Answer Any Two out of Four)

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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**B.Pharm
PH.8.3**

**8th Semester Back Examination 2018-19
CLINICAL PHARMACY AND THERAPEUTICS**

BRANCH : B.Pharma

Time : 3 Hours

Max Marks : 70

Q.CODE : F118

**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) Why milk is contraindicated to use with tetracycline?
- b) Define the term gout and write any 2 drugs used for it.
- c) Write the adverse effects of cardiac glycosides.
- d) Why the irrational use of drug occurs?
- e) Write any two examples of beta adrenergic agonist used in asthma.
- f) Name any two drugs used for treatment of urinary tract infection?
- g) Justify the use of Carbidopa in combination with Levodopa.
- h) State any two criteria for selection of essential drugs.
- i) Write any two drugs used for treatment of epilepsy.
- j) Why alcohol is contraindicated during use of aspirin?

Q2 a) Justify the use of combination of magnesium and aluminum salt as antacid and explain mechanism of action of systemic antacid. (5)
b) Explain the strategy to improve rational use of drugs. (5)

Q3 a) Classify the drugs used for treatment of peptic ulcer. (5)
b) Distinguish between stable angina and unstable angina. Explain the drugs used for angina. (5)

Q4 a) Describe about various preparations of haematinics used in anemia. (5)
b) Explain the management of tuberculosis. (5)

Q5 a) Describe the pharmacokinetic drug interaction with examples. (5)
b) Explain the requirement of Therapeutic drug monitoring and its processes. (5)

Q6 Define essential hypertension. Classify the drugs used for the treatment of hypertension. Write the adverse effect of calcium channel blockers. (10)

Q7 Describe in detail about the drugs used for treatment of diabetes mellitus and their mechanism of action. (10)

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

- a) Drugs used in asthma
- b) Antidepressant drugs
- c) Thyroxin hormone

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B.Pharm
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 Taylor. (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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B.Pharm
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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B.Pharm
PH.E.157

8th Semester Back Examination 2018-19

COSMETIC TECHNOLOGY

BRANCH : B.Pharma

Time : 3 Hours

Max Marks : 70

Q.CODE : F108

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)

- Importance of humectants in cosmetic products?
- Define Coupler.
- Classify cosmetics according to its use.
- How color is selected according to taste of a preparation
- Define and classify anti-oxidant.
- What is acne?
- Give two examples of anti-dandruff agents.
- Classify sunscreen agents.
- Name the various ingredients of eye liner.
- How Epilatories differ from Depilatories?

Q2 a) Write the objectives and significance of the quality control in cosmetic product. (5)

- b) How quality control tests of different cosmetic products are carried out discuss in detail. (5)**

Q3 a) Define skin preparation with examples. (5)

- b) Write the composition and preparation of anti-aging products. (5)**

Q4 a) Justify and explain the color cosmetics. (5)

- b) Discuss and illustrate with examples about lipstick. (5)**

Q5 Write detail notes of the followings

- a) Primary surfactants (5)**

- b) Aerosol Propellants (5)**

Q6 Classify shaving preparations. Mention the various ingredients and preparation methods of aftershave lotion (10)

Q7 Discuss the general characteristics and raw materials used in Nail polish, with its evaluation. (10)

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

- Effect of Light on Stability
- Q.C. tests of shampoo
- Hair Dyes