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Total Number of Pages : 01

B.Pharm
15PH80

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8th Semester Regular Examination 2018-19

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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.

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Part-III

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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.

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Part- II

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

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

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

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B.Pha
15PH8

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)

- What is Industrial Marketing?
- What is Consumerism?
- What is the role of reference check in recruitment process?
- What is pharmaceutical marketing?
- What is delegation of authority in management?
- What is Bank reconciliation statement?
- 360° appraisal is conducted for the promotion to top management position. Is it true?
- What do you mean by book keeping in accounting?
- What is the survey method of demand forecasting technique?
- 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)

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

Part-III

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

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.

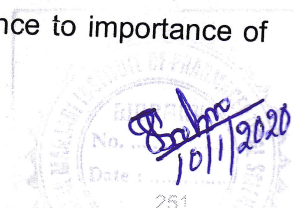
(16)

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? 251
- 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. 251 251
- 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? 251 251 251 251 251 251 251
- 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? 251 251 251 251 251
- 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?

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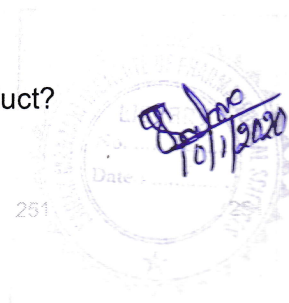
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Part-III

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

- Q3** Discuss the salient features and guidelines of GMP and cGMP?
251 251 251 251 251 251
- Q4** Discuss Quality audit with suitable examples? Describe briefly the audit life cycle?
- Q5** Describe the validation of water system for sterile and non-sterile products? Give examples.
- Q6** Discuss the standard operating procedures for UV spectrophotometer and HPLC? Write the significance?
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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

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

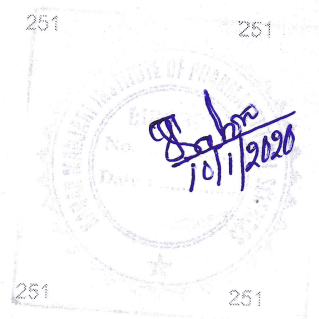
Discuss the various aspects of Clinical pharmacy and write about the roles of a Clinical pharmacist. (16)

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 versus 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)

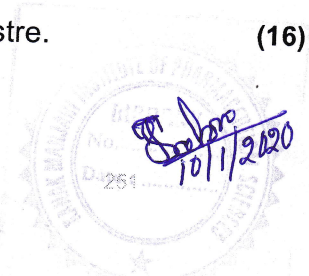
Describe the different parameters for quality control and quality assurance of herbal ingredients as per WHO guidelines. (16)

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.8.1

251 8th Semester Regular / Back Examination 2017-18
PHARMACEUTICS – VII
(FORMULATION DESIGN & NEW DRUG DELIVERY SYSTEM)
BRANCH : B.Pharma
Time : 3 Hours
Max Marks : 70
Q.CODE : C102

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)

- Write two techniques for determination of crystallinity of drugs.
- Write the formulae of 'Carr's index' and 'Hausner ratio'?
- What are the advantages of controlled drug delivery system?
- Write medical applications of stealth liposomes.
- Explain the feasibility of erythrocytes as carrier system for targeted drug delivery.
- What is opsonization? How it can be reduced in case of liposomes?
- Differentiate between drugs and cosmetics.
- Write the properties of surfactants used in case of baby shampoos.
- What do you mean by super critical fluid technology?
- Write about the main components of an osmotic pump?

Q2 a) What is solubility analysis? Write its importance in case of preformulation study.

(5)

b) What is polymorphism? Why it is essential to identify a stable polymorph of a drug during preformulation study?

(5)

Q3 a) Describe briefly about evaluation of sustained release dosage forms.

(5)

b) Write in brief about delayed release oral dosage forms.

(5)

Q4 a) Write about the factors influencing controlled drug delivery system.

(5)

b) Describe briefly about dissolution controlled drug delivery system.

(5)

Q5 a) Differentiate between solvent evaporation method and polymerization method of preparation of nanoparticles.

(5)

b) Describe briefly about characterization of liposomes.

(5)

Q6 a) Explain about the basic components of transdermal drug delivery system.

(5)

b) Describe in details about evaluation of transdermal patch.

(5)

Q7 Write about formulation, preparation and evaluation of different types of shampoos.

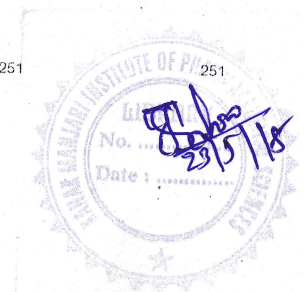
(10)

Q8 Write short answer on any TWO :

(5 x 2)

- Nail polish
- Ocusert
- Baby cream
- Partition coefficient

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B.Pharm
PH.8.3

8th Semester Regular / Back Examination 2017-18
CLINICAL PHARMACY AND THERAPEUTICS

BRANCH : B.Pharma

Time : 3 Hours

Max Marks : 70

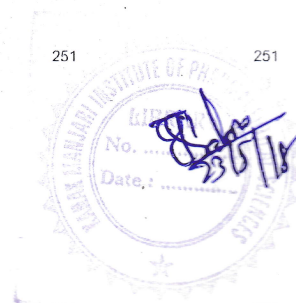
Q.CODE : C170

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 : (2x10)
- a) Define the term 'Pharmacotherapy' 251 251 251 251
 - b) Why the combination of magnesium and aluminum salt are used as antacid?
 - c) Milk is contraindicated with tetracycline. Justify.
 - d) Name any two drugs used in Hodgkin's disease.
 - e) Write any two drugs used in epilepsy?
 - f) Write the uses of thyroxin hormone.
 - g) Name any two immunosuppressants used as antirheumatoid drugs.
 - h) Name any two drugs used for treatment of urinary tract infection? 251 251
 - i) Justify the use of Carbidopa in combination with Levodopa.
 - j) Define the term "Essential Drugs".
- Q2. Classify antihypertensive drugs with suitable examples. Name the antihypertensives found safer during pregnancy. (5+5)
- Q3. Write short note on :
- a) Management of Peptic ulcer. 251 251 251 251 (5)
 - b) Drugs used for treatment of Asthma. (5)
- Q4. Write short note on :
- a) Therapeutic drug monitoring (5)
 - b) Rational use of drugs. (5)
- Q5. Describe in detail about the drugs used for treatment of diabetes mellitus and their mechanism of action. (10) 251
- Q6. Write short note on :
- a) Management of tuberculosis. (5)
 - b) Drugs used for treatment of anemia. (5)
- Q7. Define drug interaction. Describe various types of pharmacokinetic drug interaction with examples. (10) 251
- Q8. Write short on :
- a) Predictable/ type A adverse drug reaction. (5)
 - b) Management of gout. (5)

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B.PHARM²⁵¹
PH 8.4

8th Semester Regular / Back Examination – 2017-18

Quality Assurance and GMP

Branch: B.Pharma

Time: 3 Hours

Max marks: 70

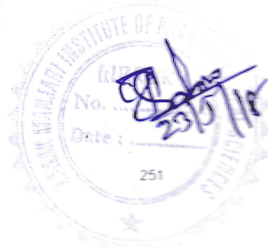
Q Code: C239

Answer Question No.1 which is compulsory and any five from the rest.

The figures in the right hand margin indicate marks.

Answer all parts of a question at a place.

- Q1 251 Answer the following questions : *Short answer type* : 251 (2 x 10) 251
- a) Define audit and classify it.
 - b) What is schedule M? What are its elements and sub elements?
 - c) Define quality policy?
 - d) What do you mean by process validation and process optimization?
 - e) What is equipment validation and what are its steps?
 - f) 251 Classify and signify the role of HVAC systems in environment control. 251
 - g) What do you mean by master formula record? What should an ideal MFR contain?
 - h) What do you mean by Mean Kinetic temperature? How does temperature influence stability of pharmaceutical products?
 - i) Signify the role of DRA in regulating pharmaceutical product quality.
 - j) 251 Expand the terms ISO and ICH. 251
- Q2 Write short notes on:
- a) What is cleaning validation and Rinse samples? (5)
 - b) Swab technique. (5)
- Q3 251 Write about ideal requirements of 251 warehouse for pharmaceutical products both RM and FP. (5) 251
- a) Terminal sterilisation and sterile filtered products (5)
- Q4 a) Retrospective validation. (5)
- b) Analytical validation. (5)
- Q5 251 a) Discuss briefly about functions of drug regulatory authority as per U.S. 251 (5) 251
- b) Discuss briefly about DRA functionality as per Indian scenario. (5)



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B.Pharm.
PH.8.5

8th Semester Regular / Back Examination 2017-18
PHARMACEUTICAL MANAGEMENT
BRANCH : B.Pharma

Time : 3 Hours

Max Marks : 70

Q.CODE : C288

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 :

(2 x 10)

- What is productivity?
- What do you understand by the term lead time uncertainty in inventory control?
- What are the qualities needed in an entrepreneur?
- What is a trial balance and how it can be prepared?
- What are the indirect channels of distributions?
- State the concept of individual and group morale.
- Briefly mention different types of insurances.
- How should be the compensation of a pharmacist?
- What are different store keeping functions?
- Briefly describe the personal and vocational qualities of a salesman.

Q2. Briefly describe the different leadership styles followed by managers. (10)

Q3. Explain the purchasing process followed by organizations. (10)

Q4. What is communication process? Explain with special reference to its types and barriers. (10)

Q5. Explain the law of demand and law of supply with their exceptions. (10)

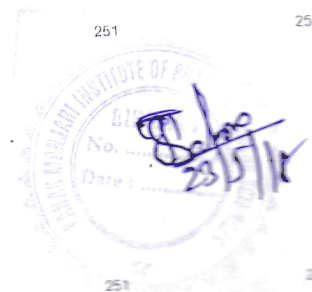
Q6. 14 principles of management given by Henry Foyal are still valid. Justify with explanation as needed. (10)

Q7. What is a promissory note? Mention its parties, characteristics and advantages. (10)

Q8. Differentiate between (Any TWO) : (5 x 2)

- Balance sheet
- Import and export
- Advertisement

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B.Pharm.
PH.E.7

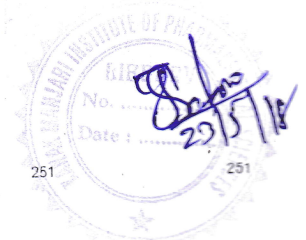
8th Semester Regular Examination 2017-18
HOSPITAL PHARMACY ADMINISTRATION
BRANCH : B.Pharma
Time : 3 Hours
Max Marks : 70
Q.CODE : C390

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 ABC analysis?
b) Mention the temperature range for different storage conditions.
c) Classify hospitals on the basis of size.
d) What is a hospital formulary?
e) What is drug dependence?
f) What is a satellite pharmacy?
g) Write the objectives of Drug committee.
h) Differentiate LVP and SVP.
i) Define 'budget'.
j) Write down the number of pharmacists required for Hospitals as per bed strength.
- Q2. a) Write notes on composition and function of Research and Ethics committee.
b) Responsibilities of Hospital Pharmacist.
- Q3. a) Define Hospital Formulary system. Write about its contents.
b) Write about the composition, function and roles of Drug Committee.
- Q4. What are the various methods of drug distribution for inpatients? Write about Floor stock system with its advantages and disadvantages.
- Q5. a) What is purchasing? Write down the steps involved in the purchasing procedure.
b) What is the composition and function of infection control committee?
- Q6. a) Write notes on the Evaluation procedures for Tablets
b) Write notes on test for Pyrogens.
- Q7. a) Write notes on IV additive services.
b) Write notes on drug distribution to Out patients.
- Q8. Write short notes on any TWO :
- a) Research and Ethics committee
b) Distribution of Drugs of dependence.
c) Drug recall
d) Stock taking



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