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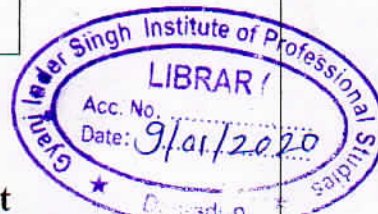
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Odd semester examination, 2019-20

B.PHARM. (Semester-VII)

Pharmaceutical Industrial Management

TIME: 03:00 Hours



Max. Marks: 100

Total no. of printed pages: 1

Note : Attempt all questions.

Q1. Answer any **four** out of five:

4×5=20

- Discuss the compensation given to pharmacist.
- Explain functions of production management?
- Name the important feature of good control system.
- Define the term Directing. Describe various steps involve in Directing.
- What do you know about Entrepreneurship? Write in brief about different types of Entrepreneurship.

Q2. Answer any **four** out of five:

4×5=20

- Write the various principles of Coordination.
- Write the characteristics of Communication.
- Write the Salient features of Motivation
- Explain the functions of retail departmental store
- Mention the qualities of a good leader.

Q3. Answer any **two** out of three:

2×10=20

- Differentiate between advertisement and sales promotion.
- Write a short note on Ledger posting and balance sheet.
- Define the term Economics. Explain the principles of economics with special reference to the law of demand and supply.

Q4. Answer any **two** out of three:

2×10=20

- Define the term Marketing. Name the various marketing functions. Explain any two functions in detail.
- Discuss the various techniques of sales promotion. Write the objectives of sales promotion.
- Explain space management optimization is the key to success of an organization

Q5. Answer any **two** out of three:

2×10=20

- Write a note in detail on Procurement and Receipt.
- Explain the term "Demand" .what is demand curve? Mention the factors which influence the demand for a commodity?
- What is Market research? Discuss the nature, significance of market research in modern business with special reference to pharmaceutical industry.



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**B. Pharma (Semester-VII)**  
**PHARMACEUTICS - VII (BIO PHARMACEUTICS & PHARMACOKINETICS)**

Time: 3 hours

Max. marks: 100

Total no. of printed pages: 1

**Note: Attempt all questions, each questions carry equal marks.**

1. Attempt **any four** of the following: (5x4=20)
  - a) Discuss the pH partition hypothesis and limitations of this hypothesis.
  - b) Brief note on Clinical pharmacokinetics.
  - c) What are the basic theories of dissolution.
  - d) Various factors affecting absorption of drug from the GIT.
  - e) Short note on Active transport.
2. Attempt **any four** of the following: (5x4=20)
  - a) Significance of plasma drug concentration profile.
  - b) Define Bioequivalence. What is the need of bioequivalence studies?
  - c) Metabolism of drug in the body
  - d) Write derivation of one compartment open model assuming drug is administered through i.v. bolus injection
  - e) Discuss Wagner Nelson method for determination of absorption rate constant.
3. Attempt **any four** of the following: (5x4=20)
  - a) Differentiate between zero & first order kinetics.
  - b) What do you understand by distribution coefficient?
  - c) Short note on drug-drug interaction & their role in combination therapy.
  - d) Discuss the terms organ clearance & intrinsic clearance.
  - e) Discuss the purpose of IVIVC.
4. Attempt **any 2** of the following: (10x2=20)
  - a) Various pharmacokinetic parameters obtained from drug plasma level profile.
  - b) Explain the concept of drug protein binding. Discuss the impact of protein binding on different pharmacokinetic parameters of the drug.
  - c) Define volume of distribution. Enlist and discuss various pharmacokinetic parameters calculated from plasma and urine data after drug administration from oral route.
5. Attempt **any 2** of the following: (10x2=20)
  - a) Discuss the process of elimination of drug from the body, emphasizing on the renal route.
  - b) Describe the mechanism of renal excretion of drugs.
  - c) Write a note on regulatory requirements for conduction of bioequivalence study.



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**Odd Semester Examination 2019-20**  
**B. Pharma. 4<sup>th</sup> Year (Semester-VII)**  
**MEDICINAL CHEMISTRY-III**

**Time: 03:00 Hrs**

**Max Marks:100**

**Total no. of printed pages: 1**



**Note: All questions are compulsory.**

Q1. Attempt any four of the following:

4x5=20

- Give in detail about introduction, Nomenclature and Stereochemistry of Steroids.
- Discuss structure activity relationship of sex hormones.
- What is Estrogens and classify it. Write the synthesis of Estradiol.
- Classify Adrenocorticoids and write the synthesis of Betamethasone.
- Give the classification of Anti-fertility drugs and MOA of Progesterone.

Q2. Attempt any four of the following:

4x5=20

- What is Penicillin?, classify it and MOA of Penicillin.
- Classification of Tetracycline, write the MOA of Tetracycline.
- What are mycobacteria? Classify Antimycobacterial drugs, MOA of Isoniazid.
- Classify Quinolones and write the SAR of Quinolone.
- Give structure, mechanism of action and synthetic method of any two isoniazid, norfloxacin, nalidixic acid.

Q3. Attempt any four of the following:

4x5=20

- Give the classification of Antimalarial drugs and MOA of Chloroquine.
- Write the classification of Antiamoebic drugs and give the synthesis of Metronidazole.
- Classify Antiseptic and Disinfectant, synthesis of Benzalkonium.
- Classify Antifungal drugs, give the synthesis of Clotrimazole.
- Write the classification of Antibacterial drugs and SAR of Sulphonamide.

Q4. Attempt any four of the following:

4x5=20

- Classify Antiviral drugs and MOA of Idoxuridine.
- Write the classification of Anticancer drugs and MOA of Methotrexate.
- Give the classification of Prostaglandins and synthesis of Misoprostol.
- Classify Anti-HIV drugs and MOA of Reverse Transcriptase inhibitor.
- Discuss in detail alkylating agents.

Q5. Attempt any two of the following:

2x10=20

- Write the classification of Thyroid and Antithyroid drugs, synthesis of Carbimazole and MOA of Thiourea.
- What is hypoglycaemics? Classify it, write the MOA of Insulin and synthesis of Metformin.
- i) Synthesis of Tolbutamide and Methimazole.  
ii) SAR and MOA of Sulfonylurea.

PHR- 704

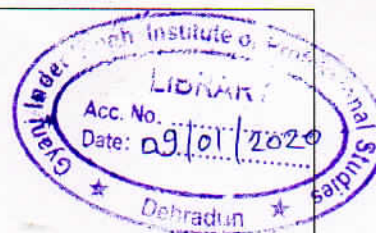
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Odd Semester Examination 2019-20

B.Pharm 7<sup>th</sup> Semester

Pharmacology- III



Time: 03:00 Hours

Max.Marks : 100

Total no. of printed pages: 1

**Note:**All questions are compulsory.

Q1. Attempt all questions in brief.

10x2=20

- Define therapeutic index.
- Define Pharmacoepidemiology.
- Write mechanism and effect of Hydrotherapy.
- Define Chromotherapy.
- Write adverse effects of Rifampin
- Write mechanism of action of Dapsone.
- Enlist uses of Azithromycin.
- Write two toxic effects of Gentamicin.
- Enlist uses of vitamin D.
- Define Toxicology.

Q2. Write MoA, Side effect and therapeutic use of any **Five**

5x4=20

- Mertrnidazole
- Primaquine
- Albenazale
- Griesofulvin
- Raloxifene
- Vincristine

Q3. Attempt any **Two** of the following.

2x10=20

- Define Diabetes. Classify oral hypoglycemic drugs and discuss mechanism of actions and adverse of Sulfonylurea and Biguanides.
- Enumerate drugs used in hyperthyroid drugs. Write a note on propylthiouracil.
- Write mechanism of action, adverse effects and uses of Penicillin, Methotrexate, Mercaptopurine and Fluorouracil.

Q4. Attempt any **Two** of the following.

2x10=20

- Explain synthesis, storage and release of corticosteroids with pharmacological actions.
- Write short note on  
(i) organophosphorus poisoning (ii) pharmacology of testosterone.
- Define Bioassay, its principles. Explain bioassay methods of oxytocin.

5. Attempt any **Two** of the following.

2x10=20

- Discuss drug resistance in detail with special reference to antitubercular drugs.
- Classify Chemotherapeutic agent based on mechanism of action Write short note on fluoroquinolone.
- Classify antiviral drugs and discuss mechanism of action and uses of Acyclovir.



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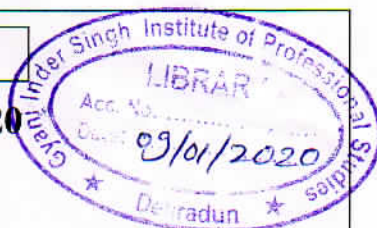
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**Odd Semester Examination 2019-20**  
**B.Pharm. (SEMESTER VII)**  
**PHARMACOGNOSY-IV**

**Time: 03:00 Hours**

**Max Marks : 100**

**Note: All questions are compulsory.**



**Q1. Give Biological source, macroscopic character, chemical constituents and uses of any four of the following drugs. 4x5=20**

- (a) Nux-vomica
- (b) Kurchi
- (c) Tea
- (d) Vasaka
- (e) Tobacco

**Q2. Attempt any Four of the following. 4x5=20**

- (a) Write a note on application of plant tissue culture in Pharmacognosy.
- (b) Write an explanatory note on Nutritional requirement for plant tissue culture media.
- (c) Define the term plant tissue culture. Explain the growth and maintenance of PTC.
- (d) Write a note on Historical development of plant tissue culture.
- (e) Name the types of plant tissue culture and explain callus culture.

**Q3. Attempt any Two of the following. 2x10=20**

- (a) Define Enzyme. Write a note on Papain.
- (b) Discuss Plant bitters and sweeteners with suitable examples.
- (c) Give biological source, preparation, identification test and uses of Penicillinase or Diastase.

**Q4. Attempt any two of the following 2x10=20**

- (a) Write a note on alkaloids. Give official source, macroscopic characters, chemical constituents and uses of opium.
- (b) Write down worldwide trade of Liquorice and Aloe.
- (c) Describe the life cycle of ergot. Give an account of its active constituents and therapeutic uses.

**Q5. Attempt any Two of the following. 2x10=20**

- (a) Write in brief about the techniques employed in elucidation of biosynthetic pathways.
- (b) Write in brief about role of medicinal and aromatic plants in national economy.
- (c) Give the worldwide trade of Taxol Or Rauwolfia.