R17

Code No: 246AB

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Pharmacy III Year II Semester Examinations, February/March-2022
PHARMACOLOGY - III

Time: 3 Hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
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1.a) Enlist drugs used in asthma. Describe omalizumab.
b) Classify anti-tussive agents. Discuss peripherally acting agents. [8+7]

2.a) Give classification of anti-secretory agents used in ulcer. Describe them.
b) Describe D_2 receptor antagonists as anti-emetics. [8+7]

3.a) Describe genetic determinants of antibiotic resistance.
b) Write a note on co-trimoxazole. [8+7]

4.a) Explain the drawbacks of penicillin. Discuss reverse spectrum penicillins.
b) Discuss mechanism of action and adverse effects of aminoglycoside antibiotics. [8+7]

5.a) Classify antiviral agents. Write a note on favipiravir.
b) Enlist the drugs used in tuberculosis. Comment on combination therapy in tuberculosis. [8+7]

6.a) Justify the use of Pyrimethamine and sulphadoxine in malaria.
b) Give mechanism of action, therapeutic uses and adverse effects of systemic anti-fungal agents. [8+7]

7.a) Classify anticancer agents. Give an account of methotrexate.
b) Discuss anti-HIV drugs with their mechanism of action and adverse effects. [8+7]

8.a) Describe mechanism, pharmacological actions and side effects of immunosuppressive antimetabolites.
b) Write a note on biosimilars. [8+7]

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Code No: 247AD **R17**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Pharmacy IV Year I Semester Examinations, February-2022
NOVEL DRUG DELIVERY SYSTEMS

Time: 3 Hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
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1.a) Explain the Controlled Release of drugs from Ion – Exchange Resins.
b) Write about the process of polymeric degradation and Erosion. [8+7]

2.a) Write about Matrix Dissolution Controlled Release systems.
b) Explain the application of polymers in formulation of Controlled Release Drug Delivery systems. [8+7]

3.a) Write about microcapsules and microspheres formulation, preparation methods and write advantages and disadvantages of Microcapsules/ Microspheres.
b) Explain the applications of microcapsules/microsphere. [10+5]

4.a) Explain the formulation of bioadhesive Buccal Drug Delivery systems.
b) Explain the advantages and disadvantages of bioadhesive Buccal Drug Delivery systems. [8+7]

5.a) Explain the formulation and drug release from Meter Dose inhalers.
b) Write about various strategies used to increase Nasal absorption of drugs. [10+5]

6.a) Write about permeation enhancers used in Transdermal Drug Delivery systems.
b) Write about formulation of high-density Gastro Retentive Drug Delivery systems and their applications. [7+8]

7.a) Write about formulation and preparation techniques of nanoparticles.
b) Explain the applications of Monoclonal antibodies. [12+3]

8.a) Explain the development of Intra uterine Devices.
b) Write about Intra ocular barriers and methods to overcome them. [10 +5]

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Code No: 247AE **R17**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Pharmacy IV Year I Semester Examinations, February-2022
PHARMACEUTICAL MARKETING

Time: 3 Hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
- - -

1.a) Write the definition, general concepts, and scope of marketing.
b) Give the application of market research. [10+5]

2. Write short notes on:
a) Motivation and prescribing habits of the physician.
b) Patients' choice of physician and retail pharmacist. [7+8]

3. Give an elaborate note on Product management in pharmaceutical industry. [15]

4. Discuss in detail about product portfolio analysis. [15]

5. What are OTC products? Give examples. How they are sold in the market. Suggest the online promotional techniques for OTC Products. [15]

6. What are the sales promotion techniques followed for selling pharmaceutical products? Discuss them in detail. [15]

7. What is called channels of distribution? Give their importance. Detail about Pharmaceutical marketing channels. [15]

8. Write an overview of DPCO (Drug Price Control Order) and NPPA (National Pharmaceutical Pricing Authority). [15]

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Code No: 247AC **R17**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Pharmacy IV Year I Semester Examinations, February-2022
PHARMACY PRACTICE

Time: 3 Hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
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1. Discuss Organization and Structure of a Hospital in detail. [15]

2. Discuss Organization and structure of retail and wholesale drug store in detail. [15]

3. Discuss dispensing of drugs to ambulatory patients in detail. [15]

4. Discuss staff and infrastructure requirements of Community pharmacy management. [15]

5. Discuss Sources of drug information in detail. [15]

6. Discuss Code of ethics for community pharmacy. [15]

7. Discuss Drug therapy monitoring in detail. [15]

8. Write notes on
   a) Economic order quantity.
   b) Purchase and inventory control. [7+8]

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Code No: 247AF **R17**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Pharmacy IV Year I Semester Examinations, February-2022
PHARMACEUTICAL REGULATORY SCIENCE

Time: 3 Hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
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1.a) What is lead discovery? Describe various approaches for lead discovery.
b) Give importance of safety pharmacological and pharmacological studies in drug discovery. [8+7]

2. Enlist the phases of drug discovery. Explain clinical studies in detail. [15]

3. Discuss in detail process of ANDA application as per USFDA. [15]

4.a) What is CDSCO? Discuss different types of applications in Indian market.
b) Describe process of approval for biologics in Japan. [8+7]

5. What is CTD? Explain its modules in detail. [15]

6.a) Give a brief account of type I Drug Master files.
b) Explain in brief the process of export of pharmaceutical product as per Indian regulations. [8+7]

7.a) Discuss the constitution of institutional review board. Explain roles and responsibilities of each member.
b) Describe functions of clinical trial monitor. [8+7]

8.a) Discuss the contents of orange book.
b) Write a note on Federal Register. [8+7]

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Code No: 247AH **R17**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Pharmacy IV Year I Semester Examinations, February-2022
QUALITY CONTROL AND STANDARDIZATION OF HERBALS

Time: 3 Hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
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1.a) Write the phytochemical screening for alkaloids, glycosides, and flavonoids.
b) What are the evaluation techniques used to check the quality of medicinal plants. Describe about microscopic evaluation of herbal drugs. [10+5]

2. Describe in detail about WHO guidelines for toxicological evaluation of medicinal plant materials. [15]

3. Discuss in detail about WHO Guidelines on GACP for Medicinal Plants materials. [15]

4. Write in detail about WHO Guidelines on current good manufacturing Practices (cGMP) for Herbal Medicines. [15]

5. Enlist the ICH guidelines for quality control of herbal drugs. Describe in detail about quality and efficacy guidelines for quality control of herbal drugs. [15]

6. What are research guidelines for evaluating the Safety and Efficacy of Herbal Medicines? Discuss them in detail. [15]

7. Define and classify chromatography. Elaborate the application of various chromatographic techniques in standardization of herbal products. [15]

8. Define marker compound. Discuss the role of chemical and biological markers in standardization of herbal products. [15]

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Code No: 247AG **R17**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Pharmacy IV Year I Semester Examinations, February-2022
PHARMACOVIGILANCE

Time: 3 Hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
- - -

1. Write in detail about the WHO drug monitoring programme. [15]

2. Define Causality assessment. Explain in detail about different methods of causality assessment. [15]

3. Explain about the operation of drug safety in industry with ICH guidelines. [15]

4. What are the basic drug information resources and write about the advantages and disadvantages of the basic drug information resources. [15]

5. What is active and passive surveillance? How do you monitoring them. [15]

6. Give a brief note on the following:
   a) Vaccine pharmacovigilance.
   b) Targeted clinical investigations. [7+8]

7.a) Discuss the organization and objectives of ICH.
   b) What are the different phases in clinical trials? [8+7]

8. Describe about the drug safety evaluation of the following population:
   a) Pregnancy and lactation.
   b) Geriatrics. [8+7]

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