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CZ—4—2018

FACULTY OF PHARMACEUTICAL SCIENCES AND TECHNOLOGY

B.Pharm. (Final Year) (VII Semester) EXAMINATION

MARCH/APRIL, 2018

COSMETIC TECHNOLOGY

(Friday, 20-4-2018) **Time : 2.00 p.m. to 4.00 p.m.**

Time—Two Hours *Maximum Marks*—50

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Answer to the point only.

(*iii*) Figures to the right indicate full marks.

(*iv*) Illustrate your answer with neat sketch wherever necessary.

1. Solve any *five* of the following : 5×2=10

(*a*) Mention any *four* marketed brands of cosmetics.

(*b*) Define cleansing cream.

(*c*) Enlist essential raw materials used for the manufacturing of powders.

(*d*) Enlist any *four* Hair Care products.

(*e*) Give ideal characteristics of lipsticks.

(*f*) Write a note on eye liner.

(*g*) Give formula for face powder.

2. Solve any *four* of the following : 4×3=12

(*a*) Write a short note on antioxidants and preservatives used in cosmetics.

(*b*) Write in brief about nutritive cream.

(*c*) Give the ideal characteristic of tooth paste.

(*d*) Give general method of preparation of nail paint.

(*e*) Give evaluation test for shampoos.

(*f*) Write in brief about Mascara.

P.T.O.

3. Solve any *four* of the following : 4×7=28

(*a*) Describe in detail the microbial contamination in cosmetics.

(*b*) Give the requirement of factory premises for manufacturing of cosmetics as per D and C Act.

(*c*) Give the status and structure of cosmetic industry.

(*d*) Explain in brief about various categories of raw materials used in cosmetic industry.

(*e*) Give the evaluation test for lipsticks.

(*f*) Give formulation and manufacturing of face powder and compacts shampoos.

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CZ—12—2018

FACULTY OF PHARMACEUTICAL SCIENCES

B.Pharm. (VII Sem.) EXAMINATION

MARCH/APRIL, 2018

MEDICINAL CHEMISTRY—III

(BPH-702)

(Monday, 23-4-2018) **Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours* *Maximum Marks*—50

N.B. :— (*i*) Write all answers to the point only.

(*ii*) Draw structure and write reactions wherever necessary required.

(*iii*) Support your answer with suitable example.

1. Solve any *five* of the following : 10

(*a*) Name the drug and draw structure of drug with following nomenclature of quinolone class of antibiotics.

(*b*) Write IUPAC name and draw structure of trimethoprim.

(*c*) What are different units for measurement of antibiotic potency ?

(*d*) Write IUPAC name and draw structure of HIV protease inhibitors.

(*e*) Compare the sequence of normal and cancer cell cycle.

(*f*) Name the drug and draw the structure of 4-amino-5-fluoro-2 (1H) pyrimidinone is .....

(*g*) One of the following conversion is only take place in bacterial cell :

(*i*) Dihydropteroic acid to DHFA

(*ii*) DHFA to THFA

(*iii*) DHFA to dihydropteroic acid

(*iv*) THFA to DHFA.

P.T.O.

2. Solve any *four* of the following : 12

(*a*) Draw comparative structure of penicillin and cephalosporine.

(*b*) Write reaction for synthesis of methotrexate.

(*c*) Write rationale for the following combination :

(*i*) β-lactam antibiotics + β-lactamase inhibitor

(*ii*) σ-mercaptopurine + Allopurinol.

(*d*) Write SAR of sulphonamide.

(*e*) Draw the structure and write IUPAC name of acyclovire and idoxuridine.

(*f*) Write the reaction for synthesis of sparfloxacin.

3. Solve any *four* of the following : 28

(*a*) Write chemical classification of antineoplastic agents with suitable examples.

(*b*) Explain SAR of aminoglycoside and penicillin.

(*c*) Write chemistry and SAR of tetracycline with suitable example.

(*d*) Write chemical classification of quinolone on the basis of chemical skeleton with SAR in detail.

(*e*) Draw the structure of the following :

(*i*) Chloramphenicol

(*ii*) Vidarabine

(*iii*) Sulfamethaxazole

(*iv*) Lomustine

(*v*) 6-Thioguanine

(*vi*) Chlorambucil

(*vii*) Ciprofloxacine.

(*f*) What is receptor target for the following drugs :

(*i*) Clavullinic acid

(*ii*) Sulphonamide

(*iii*) Polypeptide

(*iv*) Zidovudine

(*v*) Paclitaxel

(*vi*) Amoxialline

(*vii*) Cephemandon.

This question paper contains 2 printed pages]

CZ—20—2018

FACULTY OF PHARMACEUTICAL SCIENCES

B.Pharm. (Seventh Semester) EXAMINATION

MARCH/APRIL, 2018

BIO-PHARMACEUTICS

(Wednesday, 25-4-2018) **Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours* *Maximum Marks*—50

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Draw diagrams wherever necessary.

(*iii*) Figures to the right indicate full marks.

1. Solve any *five* of the following : 5×2=10

(*a*) Give the application of prodrug.

(*b*) Enlist the drug metabolising organ and enzyme.

(*c*) Define the terms :

(*i*) Bioavailability

(*ii*) Dosage regimen.

(*d*) Enlist various physiological barriers to distribution of drugs.

(*e*) Define the term Renal clearance and Total body clearance.

(*f*) Enlist the theories of drug dissolution.

(*g*) What do you mean by Gastric emptying time ?

2. Solve any *four* of the following : 4×3=12

(*a*) Explain in brief mechanisms of drug absorption.

(*b*) Discuss in brief physiologic barriers of distribution of drugs.

(*c*) What are hard drugs ? What are their advantages over a conventional drug ?

(*d*) Explain the principal processes involved in urinary excretion of drugs.

P.T.O.

(*e*) Explain in brief the binding of drug to blood components.

(*f*) Explain first pass effect metabolism.

3. Solve any *four* of the following : 4×7=28

(*a*) Explain in brief about pH-partition hypothesis.

(*b*) Explain pharmacokinetic application of prodrug design.

(*c*) Discuss in detail factors affecting drug distribution.

(*d*) Enlist factors affecting protein drug binding and explain in detail drug related factors.

(*e*) Discuss mixed function oxidase and its role in biotransformation.

(*f*) Enlist different non-renal routes of drug excretion and write about salivary excretion of drug.

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CZ—28—2018

FACULTY OF PHARMACEUTICAL SCIENCE

B. Pharm. (Fourth Year) (Seventh Semester) EXAMINATION

MARCH/APRIL, 2018

SPECTRO-ANALYTICAL TECHNIQUES

(Friday, 27-4-2018) **Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours* *Maximum Marks*—50

N.B. :— (*i*) All questions are compulsory.

(*ii*) Illustrate your answers with neat sketches wherever necessary.

(*iii*) Figures to the right indicate full marks.

1. Solve any *five* of the following : 5×2=10

   (*a*) Give the limitations of flame photometry.

   (*b*) How will you prepare 4000 NTU.

   (*c*) Define the terms wavelength and frequency.

   (*d*) What do you mean by signlet state and triplet state ?

   (*e*) Draw the line diagram of atomic absorption spectrophotometer.

   (*f*) Why are non-metals not analysed by emission spectroscopy ?

   (*g*) State Bragg's law.

2. Solve any *four* of the following : 4×3=12

   (*a*) Write requirements in molecular structure for exhibiting fluorogenic activity.

   (*b*) How does X-rays interact with matter.

   (*c*) Give conditions for quantitative determination by nephelometry and turbidimetry.

   (*d*) Write interferences in flame photometry.

   (*e*) Differentiate between atomic absorption spectroscopy and flame emission spectroscopy.

   (*f*) Give types of emission spectra.

P.T.O.

3. Solve any *four* of the following : 4×7=28

(*a*) Comment on various detectors used and mention advantages of photographic plates over photomultipliers for detection in emission spectroscopy.

(*b*) Give theory and factors affecting nephelometry and turbidimetry.

(*c*) Discuss briefly the significance of spectroscopy in pharmaceutical analysis.

(*d*) Write application of X-ray diffraction.

(*e*) Describe instrumentation of flame photometry.

(*f*) Write factors affecting fluorescence and phosphorescence.

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CZ—36—2018

FACULTY OF PHARMACEUTICAL SCIENCES

B. Pharm. (Seventh Semester) EXAMINATION

MAY/JUNE, 2018

HERBAL TECHNOLOGY

BPH-75

(Wednesday, 2-5-2018) **Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours* *Maximum Marks*—50

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Answer to the point only.

(*iii*) Draw neat and well labelled diagram wherever necessary.

1. Solve any *five* : 10

(*i*) Define herbal drug and neutraceuticals.

(*ii*) Give biological source and uses of Amla.

(*iii*) Enlist any *four* herbs used in neutraceuticals.

(*iv*) Write about preservation and storage of Gutikas.

(*v*) Write synonames of Bhilva and Ashoka.

(*vi*) Define Asavas and Taila.

(*vii*) Define Herbal cosmetics and chromatography.

2. Solve any *four* : 3×4=12

(*i*) Write commercial method of preparation for Herbal shampoo.

(*ii*) Write biological source, chemical constituents and uses of Apamarg.

(*iii*) Write about safety of Herbal drugs.

(*iv*) Give method of preparation of Arishtas.

(*v*) Differentiate neutraceuticals and traditional plant based preparation.

(*vi*) Give classification of chromatography.

P.T.O.

3. Solve any *four* : 7×4=28

(*i*) Explain HPTLC for herbal drug evaluation with suitable examples.

(*ii*) Describe various standardization parameters applicable to Ayurvedic preparation.

(*iii*) Write biological sources chemical constituents and uses of Shatavari and Gokhru.

(*iv*) Emphasis on importance of different herbal therapies.

(*v*) Write biological sources, chemical constituents and uses of Ashoka and Arjuna.

(*vi*) Discuss WHO policy on herbal medicines.

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CZ—44—2018

FACULTY OF PHARMACEUTICAL SCIENCES AND TECHNOLOGY

B.Pharm. (Final Year) (Seventh Semester) EXAMINATION

MAY/JUNE, 2018

MODERN PHARMACEUTICS

(Friday, 4-5-2018) **Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours* *Maximum Marks*—50

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Answer to the point only.

(*iii*) Figures to the right indicate full marks.

1. Solve any *five* of the following : 5×2=10

(*a*) Define controlled release system.

(*b*) Enlist ideal characteristics of drug need for sustained release dosage form.

(*c*) Define polymers.

(*d*) Define and classify propellants.

(*e*) Give the components of aerosols.

(*f*) Define electroporation.

(*g*) Give the components of TDDS.

2. Solve any *four* of the following : 4×3=12

(*a*) Describe in brief natural polymers.

(*b*) Why propellants use used in manufacturing of aerosols.

(*c*) Write in brief about nomenclature of propellants.

(*d*) Write a note on sonophoresis.

(*e*) Describe different factors affecting permeation through skin.

(*f*) Give pharmaceutical applications of polymers.

P.T.O.

3. Solve any *four* of the following : 4×7=28

(*a*) Write in detail about manufacturing of Aerosols.

(*b*) Give evaluation of TDDS.

(*c*) Explain different approaches of SRDF based on drug modification.

(*d*) Give any *two* approaches used in development of TDDS.

(*e*) Write in detail about parameters affecting selection of polymers for SRDF.

(*f*) Give evaluation of Aerosols.

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CZ—51—2018

FACULTY OF PHARMACEUTICAL SCIENCES

B. Pharm. (Fourth Year) (Seventh Semester) EXAMINATION

MAY/JUNE, 2018

PHARMACEUTICAL MANAGEMENT

(Tuesday, 8-5-2018) **Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours* *Maximum Marks*—50

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Draw appropriate charts wherever necessary.

(*iii*) Figures to the right indicate full marks.

1. Solve any *five* of the following : 5×2=10

(*a*) Define Lead time.

(*b*) What is plant layout. Enlist types of plant layout.

(*c*) Differentiate between advertising and marketing.

(*d*) Define microeconomics and macroeconomics.

(*e*) What is green organisation ?

(*f*) Write the different methods of remuneration to the sales personnel.

(*g*) What is market segmentation ?

2. Solve any *four* of the following : 4×3=12

(*a*) Write about different levels and functions of Management.

(*b*) Write about Marketing Mix.

(*c*) Discuss different methods of training of sales personnel.

(*d*) Describe the following basic concepts of macroeconomics :

(*i*) Stock and flow

(*ii*) Capital and investment.

(*e*) Discuss about social effects of advertising.

(*f*) Define pollution. Write in brief about pharmaceutical waste management.

P.T.O.

3. Solve any *four* of the following : 4×7=28

(*a*) What is plant location ? Describe various factors to be considered while selecting a plant location.

(*b*) What is New Product Development ? Describe various stages involved in it.

(*c*) What is product life cycle ? Discuss the stages of product life cycle. Write about measure to be taken in Decline stage.

(*d*) What is inflation ? Explain various types of inflation.

(*e*) What is purchasing ? Explain different purchasing policies.

(*f*) What is global warming ? Discuss the impact of technology on environment.

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CZ—58—2018

FACULTY OF PHARMACEUTICAL SCIENCES AND TECHNOLOGY

B.Pharm. (Final Year) (VII Semester) EXAMINATION

MAY/JUNE, 2018

AUTOCOIDS AND IMMUNOMODULATORS

(Saturday, 12-5-2018) **Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours* *Maximum Marks*—50

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Draw appropriate diagram wherever necessary.

(*iii*) Figures to the right indicate full marks.

1. Answer the following (any *five*) : 5×2=10

(*a*) Write therapeutic uses of Blomhexin.

(*b*) Enlist the clinical conditions in which emetics are contraindicated.

(*c*) Define purgatives and anti-diarrhoeal.

(*d*) Give adverse effects of bronchodilators.

(*e*) Enlist various inflammatory mediators involved in an allergic response.

(*f*) What are the anti-tissue agents ? Write its examples.

(*g*) Define immunity.

2. Answer the following (any *five*) : 4×3=12

(*a*) Write on role of pentagastrin.

(*b*) Explain the triple response histamine.

(*c*) Write a note on cox-pathway.

(*d*) Write on pharmacotherapy of asthama.

(*e*) Write on mode of action and therapeutic uses of ranitidine.

P.T.O.

3. Answer the following (any *four*) : 4×7=28

(*a*) Write on role and clinical importance of immunomodulators in cancer.

(*b*) Write on pathophysiological role of thromboxane and leukotrienes.

(*c*) Write mode of action, therapeutic uses, adverse effects of methotrexate.

(*d*) Define and classify anti-histaminic agents and write pharmacology of loratidine.

(*e*) What are proton pump inhibitors ? Explain the pharmacology of omeprazole.

(*f*) What are antiemetics ? Explain the pharmacology of ondansetron.

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