This question paper contains **2** printed pages]

CJ—4—2019

FACULTY OF PHARMACY
B.Pharmacy (VII Semester) EXAMINATION
MARCH/APRIL, 2019
COSMETIC TECHNOLOGY
(BPH-71)

(Monday, 22-4-2019)   **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.

(iv) Illustrate your answer with neat sketches wherever necessary.

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

(a) What are Bromomixtures ?

(b) Give the examples of Humectants, Antioxidants and covering agents.

(c) Name the methods of manufacturing compact powders.

(d) Define epilator and depoilatories.

(e) What are primary and secondary surfectants used in shampoos ?

(f) Name the bases used in preparation of Lipsticks.

(g) Define antiperspirants and deodrants with examples.

2. Answer any *four* questions :   4×3=12

(a) Give ideal characteristics for face powders and add a note on covering agents.

(b) Draw a neat labelled diagram of skin.

(c) What is the role of sequestants in shampoos ?

(d) Explain the method of preparations of vanishing cream.

(e) What are propellants and colours used in cosmetics ? Give examples.

(f) Name the ingredients and method of preparations for shaving cream.

P.T.O.

3.   **Answer any** *four* :   4×7=28

    (a)   Define shampoos. Classify the different categories of shampoos and explain all evaluation methods of shampoos.

    (b)   Describe in brief method of preparation and formulation of lipstics.

    (c)   Add a detailed note on factory premises for the manufacturing of cosmetics.

    (d)   What are nail paints ? Add a note on preparation and evaluations of Nail paints.

    (e)   What are different ingredients used in toothpowders and mascara ?

    (f)   What are the ideal characteristics of Nail paints and shampoos ?

This question paper contains **2** printed pages]

CJ—12—2019

FACULTY OF PHARMACEUTICAL SCIENCES AND TECHNOLOGY
B.Pharm. (Seventh Semester) EXAMINATION
MARCH/APRIL, 2019
MEDICINAL CHEMISTRY—III
Paper BPH-72

(Wednesday, 24-4-2019)   **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.

(iii) Support your answers with suitable example.

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

    (a) One of the conversion is only take place in bacterial cell :

        (i) Dihydropteroic acid to DHFA

        (ii) DHFA to THFA

        (iii) THFA to DHFA

        (iv) DHFA to dihydropteroic acid.

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

    (c) Write SAR of nucleoside antiviral agents.

    (d) Write different units for measurement of antibiotic potency.

    (e) Write IUPAC name and draw structure of Trimethoprim.

    (f) Draw general structure with number designation of Beta-lactum antibiotics.

    (g) Write the name of drug and mode of action of reverse transcriptase inhibitors.

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

    (a) Explain the schematic representation for structural changes which takes place in alkylation of guanine by antineoplastic agent.

P.T.O.

(b) Draw the structure and IUPAC name of :

    (i) Thioxanthene-9-one containing drug

    (ii) Cyclovir.

(c) Write reaction for the synthesis of 5-fluorouracil.

(d) Draw comparative structure of penicillin and cephalosporin.

(e) Write SAR of sulphonamides with suitable examples.

(f) Discuss various problems faced during cancer chemotherapy.

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

(a) Write classification of quinolones on the basis of chemical skeleton with SAR in detail.

(b) Write in detail chemistry of folate pathway and highlight the target area where drug act.

(c) What is the receptor target for the following :

    (i) Clavullinic acid

    (ii) Sulphonamide

    (iii) Amoxycillin

    (iv) Polypeptide antibiotic

    (v) Zidovudine

    (vi) Quinolones

    (vii) Vincristin.

(d) Write the reaction for the synthesis of sparfloxacin and 6-mercaptopurine.

(e) Write chemistry and SAR of tetracyclin antibiotic class with suitable example.

(f) Draw the structure and IUPAC name of the following drugs :

    (i) Ampicillin

    (ii) Clavullinic acid

    (iii) Norfloxacin

    (iv) Cyclophosphamide.

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CJ—20—2019

FACULTY OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY

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

MARCH/APRIL, 2019

BIOPHARMACEUTICS

Paper BPH-73

(Friday, 26-4-2019)   **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 a diagrams wherever necessary.

(iii)   Figures to the right indicates full marks

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

   (a)   Define Absorption and Bioavailability of drug.

   (b)   Give Noyes and Whitenys equation for dissolution rate.

   (c)   Enlist different absorption mechanisms.

   (d)   Define total body clearance.

   (e)   What is tissue localization of drug ?

   (f)   Define Biotransformation. Give enzymes involved in Biotransformation.

   (g)   Give BCS classification of drugs.

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

   (a)   Give limitations of pH partition hypothesis.

   (b)   Explain Binding of drugs to HSA.

   (c)   Give factors affecting excretion of drugs.

   (d)   Define prodrugs. Give its applications.

   (e)   Explain BBB and placental barrier for distribution of drugs.

   (f)   Explain in detail displacement of drug interaction.

P.T.O.

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

   (*a*) Explain in detail first-pars effect metabolism with example.

   (*b*) Enlist different non-renal routes of drug secretion. Write about Pulmonory and Salivary Excretion of drug.

   (*c*) Write about Phase-I and Phase-II reactions.

   (*d*) Explain significances and kinetics of protein drug binding.

   (*e*) Define Gastric Emptying. Give its parameters and explain the factors affecting gastric emptying.

   (*f*) Discuss in detail factors affecting distribution of drug.

CJ—28—2019

FACULTY OF SCIENCE AND TECHNOLOGY

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

MARCH/APRIL, 2019

SPECTRO-ANALYTICAL TECHNIQUES

(BPH-74)

(Monday, 29-4-2019)   **Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours*   *Maximum Marks*—50

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

         (ii)   Your answers should be specific to the questions asked.

         (iii)   Draw neat labelled diagrams wherever possible.

         (iv)   Figures to the right indicate full marks.

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

     (a)   Why does special cooling of X-ray tubes necessary ?

     (b)   What do you mean by Rayleigh scattering.

     (c)   Give characteristic colour and emitted wavelength (nm) of flame in the following elements :

         (i)   K

         (ii)   Li

         (iii)   Ca

         (iv)   Na

     (d)   Convert the given frequency $\nu = 90$ MHz into cm^{-1}.

     (e)   What is intersystem crossing in fluorimetry and phosphorimetry.

     (f)   Distinguish between Atomic Absorption Spectroscopy and Flame Photometry.

     (g)   What do you mean by emission and absorption spectra ?

                                   P.T.O.

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

   (a) Describe total consumption burner.

   (b) How X-rays interact with matter ?

   (c) Write factors affecting fluoroscence and phosphorescence.

   (d) Write different radiation sources used in AAS.

   (e) Describe turbidimetric titrations.

   (f) Give classification of spectroscopy.

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

   (a) Write comparison about instrumentation of nephelometry and turbidimetry with neat labelled diagram.

   (b) Write applications of X-ray diffraction.

   (c) Give various types of interferences which occur in flame photometry.

   (d) Define fluorescence and phosphorescence and explain the following terms :

   (i) Immediate phenomenone

   (ii) Fluorescent indicator

   (iii) Static quenching.

   (e) Write advantages and disadvantages of AAS.

   (f) Explain different excitation sources used in emission spectroscopy.

CJ—36—2019

FACULTY OF PHARMACEUTICAL SCIENCES

B.Pharmacy (Seventh Semester) EXAMINATION

APRIL/MAY, 2019

HERBAL TECHNOLOGY

(Thursday, 2-5-2019)   C BPH—75)   **Time : 2.00 p.m. to 4.00 p.m.**

Time— Two Hours   *Maximum Marks—*50

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

(ii)   Answer to the point only.

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

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

(a)   Enlist any *four* herbs used as neutraceuticals.

(b)   Write synonames of Arjuna and Amla.

(c)   Define herbal drugs and neutraceuticals.

(d)   Define herbal cosmetics and chromatography.

(e)   Write biological source and uses of Bhilava.

(f)   Define Lehayas and Bhasma.

(g)   Write about preservation and storage of Churna.

2.   Solve any *four* of the following : $4 \times 3 = 12$

(a)   Write biological source, chemical constituents and uses of Kantkari.

(b)   Write commercial method of preparation of Herbal Shampoo.

(c)   Write method of preparation of Asavas.

(d)   Write the classification of chromatography.

(e)   Give the WHO Policy for herbal medicines.

(f)   Give the advantages of neutraceuticals.

P.T.O.

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

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

   (b) Write about safety of herbal drugs.

   (c) Write biological source, chemical constituents and uses of Brahmi and Adulsa.

   (d) Discuss various standardization parameters applicable for Ayurvedic preparations.

   (e) Write biological source, chemical constituents and uses of Rasna and Neem.

   (f) Write the importance of different herbal therapies.

CJ—44—2019

FACULTY OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY

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

MAY/JUNE, 2019

MODERN PHARMACEUTICS

(Saturday, 4-5-2019)   (BPH-76)   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* :   5×2=10

(a) Define propellent. Give its classification.

(b) Define S.R.D.F. Give its advantages.

(c) Give the advantages of aerosols.

(d) Define T.D.D.S.

(e) Give the ideal requirement of drug selected for S.R.D.F.

(f) Give the role of permeation enhancer in T.D.D.S.

(g) Why are propellants added in manufacturing of aerosol ?

2. Solve any *four* :   4×3=12

(a) Give the general formulation of pharmaceutical aerosols.

(b) Give the advantages and disadvantages of controlled release D.D.S.

(c) Write a note on permeation through skin.

(d) Define polymers. Give its classification.

(e) Describe in brief about any *two* approaches of T.D.D.S.

(f) Write in brief about cold filling apparatus used in aerosols.

P.T.O.

3. Solve any *four* : 4×7=28

    (a) What are different components of aerosol ? Describe the functions.

    (b) Explain in brief the evaluation tests for T.D.D.S.

    (c) Explain drug modification approaches in S.R.D.F.

    (d) Give the evaluation of aerosols.

    (e) Discuss components of T.D.D.S.

    (f) Give the pharmaceutical applications of polymers.

CJ—51—2019

FACULTY OF SCIENCE AND TECHNOLOGY

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

MAY/JUNE, 2019

PHARMACEUTICAL MANAGEMENT

(Tuesday, 7-5-2019)　　(BPH—77)　　**Time : 2.00 p.m. to 4.00 p.m.**

Time—2 *Hours*　　　　　　　　　　　　　　*Maximum Marks*—50

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

(ii) Figures to the right indicate full marks.

(iii) Draw appropriate charts or figures wherever necessary.

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

   (a) Define management.

   (b) Enlist inventory management techniques.

   (c) What is sales forecasting ?

   (d) Write ethics in advertising.

   (e) Define marketing information system.

   (f) Define GDP and NNP.

   (g) What is pollution ?

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

   (a) Write need of environmental management.

   (b) Discuss concept of stock and flow in macroeconomics.

   (c) Write concepts of management.

   (d) What is plant utility ? Discuss any *one* plant utility.

   (e) Discuss marketing mix.

   (f) Define advertising. Write advertising process and write its social effects.

P.T.O.

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

   (a)   Discuss principles of management.

   (b)   Write concept of product life-cycle. Discuss strategies used in maturity stage of product life-cycle.

   (c)   Define inflation. Write effect of inflation.

   (d)   Define marketing research. Write its process.

   (e)   Discuss impact of technology on environmental.

   (f)   Write reasons for new plant location. Discuss consideration for new plant location.

CJ—58—2019

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2019

AUTOCOIDS AND IMMUNOMODULATORS

(Thursday, 9-5-2019) CBPH-78) 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.

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

(a) What are autocoids ? Give its examples.

(b) Write mode of action of Rupatidine.

(c) Write therapeutic uses of granisetron.

(d) Define mucolytics and mucokinetics.

(e) Write examples of purgatives and antidiarrheal agents.

(f) What are expectorants ? Write its examples.

(g) Write on action of kinin.

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

(a) Write mode of action of therapeutic uses of mossapride.

(b) Explain the triple response of histamine.

(c) Write on physiological role of Bradykinin and substance P.

(d) Write a note on emetic drugs.

(e) Write on physiological role of IL-1 (Interleukin-1)

(f) Write on Bronchodilators.

P.T.O.

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

(a) Define and classify antihistamines agents and give pharmacology of Loratidine.

(b) Explain the pharmacology of prostaglandin.

(c) Explain the drugs therapy for asthma.

(d) Explain the pharmacology of Rabeprazole.

(e) Write on role and clinical importance of immunomodulators in viral infections.

(f) Explain the clinical importance of various inflammatory mediators in allergic respose.