This question paper contains 2 printed pages]

DC—04—2017

FACULTY OF PHARMACEUTICAL SCIENCE & TECHNOLOGY

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

NOVEMBER/DECEMBER, 2017

COSMETIC TECHNOLOGY

(Tuesday, 21-11-2017)   **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 answers with neat sketch whenever necessary.

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

(a) Define cosmetics.

(b) Enlist different raw materials used in cosmetics.

(c) Define Skin.

(d) Give ideal characteristics of Face Powders.

(e) Define epilatory and depilatories.

(f) Give ideal characteristics of cleansing cream.

(g) Give general method of preparation of Nail lacquers.

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

(a) Enlist different Hair Care Products. Write in brief about hair colorants.

(b) Define Lipsticks. Mention essential raw materials used in manufacturing of Lipsticks.

(c) Write a note on Eye Shadow.

(d) Write in brief about Cyticle remover.

P.T.O.

(e) Enlist different personal hygiene products. Write in brief about shaving soaps and creams.

(f) Define dentifrices. Give general formula for Tooth Powder.

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

 (a) Explain requirement of factory premises for manufacturing of cosmetics.

 (b) Write in detail about microbiological contamination in cosmetics and its stability.

 (c) Give eluation of Nail lacquers.

 (d) Describe in brief formulation and manufacturing Shampoos.

 (e) Give status and structure of cosmetic industry.

 (f) Write a note on antiperspirants and deodorants.

DC—11—2017
FACULTY OF PHARMACEUTICAL SCIENCES
B. Pharm. (VII Semester) EXAMINATION
OCTOBER/NOVEMBER, 2017
MEDICINAL CHEMISTRY
Paper III (BPH-702)

(Thursday, 23-11-2017)   **Time : 2.00 p.m. to 4.00 p.m.**

Time—Two Hours   *Maximum Marks—50*

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

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

      (iii)   Suppot your answers with suitable examples.

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

   (a)   Write IUPAC name and draw structure of sparfloxacin.

   (b)   Write MOA of macrolide antibiotics.

   (c)   Give physicochemical properties and therapeutic uses of chlorambucil.

   (d)   Enumerate any *four* antiviral drugs.

   (e)   Enlist SN_1 and SN_4 substituted sulphonamides.

   (f)   Give physicochemical properties and therapeutic uses of methotrexate.

   (g)   What are different unit for measurement of antibiotic potency.

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

   (a)   Write SAR of methotrexate.

   (b)   What are different problem faced in cancer chemotheraphy.

   (c)   Draw structure of 6-mercaptopurine. Write its therapeutic uses.

   (d)   Give SAR of β-lactum antibiotics.

   (e)   Write chemistry of aminoglycoside antibiotics.

   (f)   Give physicochemical properties and uses of trimethoprim.

P.T.O.

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

   (a) What are sulphonamides ? Give general SAR and MOA of it.

   (b) Give IUPAC name, SAR, MOA and reaction for synthesis of 5-fluorouracil.

   (c) What are antineoplastic agents ? Give chemical classification of antineoplastic agents with suitable example.

   (d) Give SAR of Quinolone class of antibiotics and write reaction for synthesis of sparfloxacin.

   (e) Write general SAR and MOA of tetracyline.

   (f) Classify antiviral agents with suitable examples. Give SAR and MOA of nuclcotide class of antiviral agent with suitable example.

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

DC—18—2017

FACULTY OF PHARMACEUTICAL SCIENCE & TECHNOLOGY

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

NOVEMBER/DECEMBER, 2017

BIO-PHARMACEUTICS

(Saturday, 25-11-2017)   **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 examples of mutual prodrug.

(b)   How effective surface area of the hydrophobic drug can be increased ?

(c)   Enlist factors influencing distribution of drug.

(d)   How hard drug differ from soft drug ?

(e)   True detoxication reactions in called as phase-II raection. Why ?

(f)   Define adhoc and posthoc designed prodrug examples.

(g)   Suggest the possible mechanism for absorption of the following :

(i)   Sulfonic acid

(ii)   Vit. K

(iii) Vit B_{12}

(iv)   Methyldopa.

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

(a)   Explain in brief displacement drug interaction.

(b)   Discuss in brief significance of protein drug binding.

(c)   Explain the factors affecting gastric emptying time.

(d)   Define metabolism and explain need of metabolism.

(e)   Explain organ tissue size and perfusion rate factors in distribution.

(f)   Give the limitation of pH partition hypothesis.

P.T.O.

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

   (*a*)   Enlist factors influencing G.I. absorption of drug from its dosage form. Explain the influence of pharmaceutic ingredients.

   (*b*)   Enlist and explain different barriers to drug distribution.

   (*c*)   Write about phase I, II and III reactions.

   (*d*)   Give the significance of protein drug binding.

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

   (*f*)   What are factors affects biotransformation of drugs ? Explain the effect of inhibition of drug metabolising enzymes.

DC—25—2017

FACULTY OF PHARMACEUTICAL SCIENCES AND TECHNOLOGY
B.Pharmacy (Fourth Year) (Seventh Semester) EXAMINATION
OCTOBER/NOVEMBER, 2017
SPECTRO-ANALYTICAL TECHNIQUES

(Tuesday, 28-11-2017)   **Time : 2.00 p.m. to 4.00 p.m.**

Time—Three Hours   *Maximum Marks—50*

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

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

(iii)   Figures to the right indicate full marks.

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

(a)   What is meant by inner filter effect ?

(b)   Give the limitations of atomic absorption spectroscopy.

(c)   Write the function of excitation filter used in flourimeter.

(d)   Give the Bragg's law equation.

(e)   Give the characteristics of electromagnetic radiation.

(f)   Mention the factors affecting on temperature of flame in flame photometry.

(g)   Write the applications of emission spectroscopy.

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

(a)   Comment on turbidometric titration.

(b)   Write the principle of flourometry with energy level diagram.

(c)   Write the significance of flame photometry in qualitative and quantitative elemental analysis.

(d)   Write operational procedure of atomic absorption spectroscopy.

(e)   State the principle of emission spectroscopy.

(f)   Comment on law photographic method.

P.T.O.

4×7=28

3. Solve any *four* of the following :

(a) Define fluoroscence and explain the following terms with respect to flourometry :

(i) Immediate phenomenon

(ii) Fluoroscent indicator

(iii) Static quenching

(b) Compare instrumentation of nephelometry and turbidimetry with neat labelled diagram.

(c) Discuss interferences observed in flame photometry.

(d) Enlist and explain any three sample holder used in emission spectrometer.

(e) Discuss the various applications of atomic absorption spectroscopy.

(f) Calculate energy associated with EMR having wavelength 4000 A° and report the energy Kcal/mole

$C = 3 \times 10^{10}$ cm/sec.

$h = 6.627 \times 10^{-27}$ erg. sec.

$N = 6.023 \times 10^{23}$.

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

DC—32—2017

FACULTY OF PHARMACEUTICAL SCIENCES

B.Pharm. (Seventh Semester) EXAMINATION

NOVEMBER/DECEMBER, 2017

HERBAL TECHNOLOGY

Paper BPH-75

(Thursday, 30-11-2017)　　　　　　　　**Time : 2.00 p.m. to 4.00 p.m.**

Time—2 Hours　　　　　　　　　　　　　　　　*Maximum Marks—50*

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

　　　　(ii)　Write answers to the point only.

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

　　　　(iv)　Figures to the right indicate full marks.

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

　　(i)　Differentiate between Neutraceutical and Herbal drugs.

　　(ii)　Give storage conditions for Tailas and Bhasmas.

　　(iii)　Give chemical constituents and uses of Neem.

　　(iv)　Enlist any *four* marketed preparations of Amla.

　　(v)　Define chromatography and Herbal product.

　　(vi)　Write synonyma and chemical constituents of Gokhru.

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

　　(i)　Differentiate TLC and HPTLC.

　　(ii)　Define herbal cosmetics and classify it.

　　(iii)　Write biological source, chemical constituents and uses of Punarva.

　　(iv)　Write method of preparation of Asavas.

　　(v)　Give biological source, chemical constituents and uses of Shatavari.

P.T.O.

3. Solve any *four* of the following :

   (*i*)   Write the standardization parameters for Ayurvedic formulations.

   (*ii*)   What are neutraceuticals ? Write the regulatory requirements in India.

   (*iii*) Write biological source, chemical constituents and uses of Kantakari and Shilajit.

   (*iv*) Write the W.H.O. policy on herbal medicine in India.

   (*v*)   Write the biological source, chemical constituents and uses of Nagarmotha and Lahsun.

DC—39—2017

FACULTY OF PHARMACEUTICAL SCIENCES AND TECHNOLOGY

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

NOVEMBER/DECEMBER, 2017

MODERN PHARMACEUTICS

(Monday, 04-12-2017)   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 :   2×5=10

(*a*)   Define controlled release dosage form.

(*b*)   Write a short note on Iontophoresis.

(*c*)   Enlist different approaches used in T.D.D.S.

(*d*)   Define and classify propellants.

(*e*)   Mention pre-requisites of drug candidates for sustained release dosage form.

(*f*)   Enlist different factors affecting permeation through skin.

(*g*)   Why propellant are used in manufacturing of Aerosols.

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

(*a*)   Write in brief about Natural polymers.

(*b*)   Write a note on pressure filling apparatus.

(*c*)   Give pharmaceutical application of Aerosols.

(*d*)   Write in brief about permeation through skin.

P.T.O.

(e)   Give the advantages of S.R.D.F. over conventional dosage form.

(f)   Write a note on Sonophoresis.

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

(a)   Give evaluation test of aerosol.

(b)   Explain different approaches based on drug modification in sustain release dosage form.

(c)   Explain different components used in TDDS.

(d)   Explain different components used in Aerosol.

(e)   Give the advantages and disadvantages of polymers.

(f)   Give the advantages and disadvantages of T.D.D.S.

DC—45—2017

FACULTY OF PHARMACEUTICAL SCIENCES AND TECHNOLOGY

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

NOVEMBER/DECEMBER, 2017

PHARMACEUTICAL MANAGEMENT

(Thursday, 7-12-2017)   **Time : 2.00 p.m. to 4.00 p.m.**

Time— Two Hours   *Maximum Marks*—50

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

       (ii) Your answer should be specific to questions asked.

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

     (a) What is pharmaceutical management ?

     (b) Give any *two* effects of advertising in social point of view.

     (c) What is Marketing Research ?

     (d) Give methods used to control pollution.

     (e) What is microeconomics ?

     (f) Give objective of material handing.

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

     (a) What services comes under plant utility ? Explain lighting.

     (b) Write on various stages of personal selling process.

     (c) Explain the various stages in development of new products.

     (d) Explain the following basic microeconomics concept :

         (i) Stock and flow

         (ii) Capital and Investment.

     (e) Explain the effect of global warming ?

     (f) What is product Life cycle ? Explain growth stages of product life cycle.

                                 P.T.O.

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

   (a) What factors to be considered while selecting a plant location ?

   (b) Explain Different methods of forecasting.

   (c) Define marketing information system and discuss its parts.

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

   (e) Define National Income and give different approaches for measurement of National Income.

   (f) Write about waste management in case of Pharmaceutical Industry.

DC—51—2017

FACULTY OF PHARMACEUTICAL SCIENCES

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

NOVEMBER/DECEMBER, 2017

AUTOCOIDS AND IMMUNOMODULATORS

(Saturday, 9-12-2017)   Time : 2.00 p.m. to 4.00 p.m.

Time—Two Hours   *Maximum Marks—50*

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

(ii)   Draw appropriate diagrams wherever necessary.

(iii)   Figures to the right indicate full marks.

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

   (a)   Define allergy.

   (b)   Write cases in which emetics are contraindicated.

   (c)   What are anti-diarrhoeals ? Give any *two* examples.

   (d)   Define autocoids. Enumerate various autocoids.

   (e)   Write uses of thromboxane.

   (f)   Define vaccine. Write *one* example.

   (g)   Write therapeutic uses of Ondansetron.

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

   (a)   Write clinical uses of Angiotensin.

   (b)   Write properties of second generation antihistaminics.

   (c)   Write therapeutic uses of purgatives.

   (d)   Discuss uses of prostaglandins.

   (e)   Classify anti-asthmatic drugs. Write with suitable examples.

   (f)   Discuss actions of Leukotrienes.

P.T.O.

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

    (a) Classify antacids. Write pharmacology of sodium bicarbonate.

    (b) Write pharmacology of 5-HT (5-hydroxytryptamine).

    (c) Write triple response of histamine. Write pharmacology of chlorpheniramine.

    (d) What are prokinetic drugs ? Write pharmacology of metoclopramide.

    (e) Define immunomodulators. Discuss its role in cancer.

    (f) What are antitussive ? Write pharmacology of codeine.