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IP—02—2023

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2023

INSTRUMENTAL METHODS OF ANALYSIS

Paper (BP-701T)

(Wednesday, 03-05-2023)

Time : 02.00 p.m. to 05.00 p.m.

Time—Three Hours

Maximum Marks—75

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

(ii) Answer to the point only.

(iii) Figures to the right indicate full marks.

1. Solve the following :

10×2=20

(a) What is synthetic inorganic ion exchangers ?

(b) Name the improved version of gel electrophoresis.

(c) What are fluorogenic substances ?

(d) Write functions of mobile phase used in column chromatography.

(e) Enlist the name of *three* salts used for construction of sample cell used in IR spectrophotometer.

(f) What do you mean by Gortrian Diagrams ?

(g) What is Silica gel G ?

P.T.O.

(h) Which is a forbidden transition in UV spectroscopy ?

(i) Write advantages of HPLC.

(j) Write basis of nephelometric analysis.

2. Solve any *two* of the following :

2×10=20

(a) Give instrumentation of IR spectroscopy.

(b) Describe in detail about paper electrophoresis.

(c) Explain different apparatus used in gel chromatography.

3. Solve any *seven* of the following :

7×5=35

(a) Give applications of nephelometry and turbidimetry.

(b) Describe stationary phase and papers used in paper chromatography.

(c) Describe different monochromators used in UV-visible spectroscopy.

(d) Describe different radiation sources used in Atomic Absorption Spectroscopy.

(e) Describe premix burner used in flame photometry.

(f) Write a note on column and thermal conductivity detector used in gas chromatography.

(g) Write factors affecting fluorescence.

(h) Write advantages and disadvantages of column chromatography.

(i) How TLC superior over other chromatographic techniques ?

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IP—06—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B. Pharm (Seventh Semester) EXAMINATION

APRIL/MAY 2023

INDUSTRIAL PHARMACY-II

Paper-BP702T

(Saturday, 06-05-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time— Three Hours

Maximum Marks—75

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

(ii) Figures to the right indicate full marks.

(iii) Answer to the point only.

1. Solve *all* of the following :

10×2=20

(a) Define Pilot and Scale up.

(b) What are the advantages of Technology Transfer ?

(c) Give the functions of CDSCO.

(d) Define Platform Technology.

(e) What is the objective of Phase-4 Clinical trial ?

(f) Write any *four* characteristics of TQM.

(g) Give the functions of Drug Regulatory Authorities.

(h) What is standard operating procedure ?

(i) Give the objectives of Six-sigma.

(j) Define Quality risk management and give its principle.

P.T.O.

2. Solve any *two* of the following : 2×10=20
- (a) Explain regulatory requirements approval for obtaining NDA.
 - (b) Discuss pilot plant scaleup consideration for solid dosage forms.
 - (c) Describe various stages involved in TT in Pharmaceutical industry.
3. Solve any *seven* of the following : 7×5=35
- (a) Discuss the roles and responsibilities of RA professionals.
 - (b) Give the objectives and significance of Pilot Plant.
 - (c) Explain technology transfer from R & D to production as per WHO guidelines.
 - (d) Write a note on Investigators Brochure.
 - (e) Explain in detail SUPAC guidelines.
 - (f) Discuss benefits of NABL accreditation.
 - (g) Write about the analytical methods exchanged in technology transfer.
 - (h) Explain requirements for new Drug Approval.
 - (i) Describe importance of TQM in Pharmaceutical industry.

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IP—10—2023

FACULTY OF PHARMACEUTICAL SCIENCES AND TECHNOLOGY

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

APRIL/MAY, 2023

PHARMACY PRACTICE

(BP703T)

(Tuesday, 9-5-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (1) All questions are compulsory.

(2) Answer to the point only.

1. Answer the following :

10×2=20

- (a) Define objective of hospital pharmacy.
- (b) What is P & TC ?
- (c) Give various clinical services in hospital.
- (d) Define Inventory control.
- (e) Enlist scope of community pharmacy.
- (f) Give the objectives of drug distribution system in hospital.
- (g) Define medication adherence.
- (h) Why hospital formulary is need in hospital ?
- (i) Define clinical pharmacy.
- (j) What is internal teaching program in hospital ?

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2. Solve any *two* of the following :

2×10=20

- (a) Write a note on budget preparation and implementation of budget.
- (b) Explain steps involved in patient counseling. Give its benefits.
- (c) What is Therapeutic Drug Monitoring (TDM) ? Explain current scenario of TDM in India.

3. Solve any *seven* of the following :

7×5=35

- (a) Describe functions and responsibilities of clinical pharmacy.
- (b) Explain various laboratory tests used in urine analysis.
- (c) Write a note on ABC analysis.
- (d) What are the skills require for the drug information ?
- (e) Explain methods of detecting adverse drug effects.
- (f) How patient records are maintained in community pharmacy ?
- (g) Write a note on stocking and coding.
- (h) Explain procedure for purchasing of material.
- (i) Write a short note on rational use of OTC drugs.

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IP—14—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B. Pharm (Seventh Semester) EXAMINATION

APRIL/MAY, 2023

NOVEL DRUG DELIVERY SYSTEM

Paper—BP-704-T

(Thursday, 11-5-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time— Three Hours

Maximum Marks—75

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 wherever necessary.

1. Solve the following :

10×2=20

(a) Define controlled release drug delivery system.

(b) Give ideal properties of polymers.

(c) What are the components of Microencapsulations.

(d) Give concept of Mucoadhesion.

(e) Give advantages of Implantable Drug Delivery System.

(f) Enlist components of transdermal drug delivery system.

(g) Why Niosomes are used in cancer chemotherapy ?

(h) Enlist characteristics of drugs suitable for GRDDS.

(i) Define and classify Liposomes.

(j) Give advantages of Nanoparticles.

P.T.O.

2. Solve any *two* of the following :

2×10=20

- (a) Define Microencapsulation. Explain in detail kluster aiz suspension apparatus.
- (b) What are ocular insects ? Discuss in detail non-erodible inserts.
- (c) Define transdermal therapeutic system. Discuss in detail approaches of TDDS.

3. Solve any *seven* of the following :

7×5=35

- (a) Give pharmaceutical applications of Polymers.
- (b) Give different types of IUDs.
- (c) Discuss in brief about high density system in GRDDS.
- (d) White in brief about Alzet Osmotic Pump.
- (e) Describe different factors affecting permeation through skin.
- (f) Give advantages and disadvantages of mucosal drug delivery system.
- (g) Discuss in detail Nasal sprays.
- (h) Enlist different approaches to design controlled release formulation. Discuss ion exchange principle.
- (i) Give evaluation of TDDS.