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DP—02—2022

FACULTY OF SCIENCE AND TECHNOLOGY

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

NOVEMBER/DECEMBER, 2022

INSTRUMENTAL METHODS OF ANALYSIS

Paper BP701T

(Monday, 26-12-2022)

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.

1. Solve the following : 10×2=20
- (a) Which type of molecules shows IR absorption ?
 - (b) Write limitations of Atomic Absorption Spectroscopy.
 - (c) Write characteristics of flame used in flame photometry.
 - (d) What is 'R_m' in paper chromatography ?
 - (e) Distinguish between Fluorescence and Phosphorescence.
 - (f) Define cellulose acetate electrophoresis.
 - (g) Enlist different carrier gases used in gas chromatography.
 - (h) Sketch a neat labelled diagram of HPLC.
 - (i) Give ideal requirements in the solvent used for UV-spectroscopy.
 - (j) Write interferences in flame photometry.

P.T.O.

2. Solve any *two* of the following :

2×10=20

- (a) Explain different types of absorption bands with examples in UV-Visible spectroscopy.
- (b) Describe in detail about instrumentation of gas chromatography.
- (c) Write applications of IR spectroscopy.

3. Solve any *seven* of the following :

7×5=35

- (a) Write factors affecting column chromatography.
- (b) Draw schematic diagram and give the working of Du Pont Model 430 turbidimeter.
- (c) Describe different techniques for preparation of TLC plates.
- (d) Write interferences in flame photometry.
- (e) Write a note on HETP.
- (f) Describe sample injectors in HPLC.
- (g) Write factors affecting ion exchange resins.
- (h) Describe principle of affinity chromatography with a neat labelled diagram.
- (i) Write requirements of gel used in gel chromatography.

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DP—06—2022

FACULTY OF SCIENCE AND TECHNOLOGY

B. Pharm (VII Semester) EXAMINATION

NOVEMBER/DECEMBER, 2022

INDUSTRIAL PHARMACY-II

Paper BP702T

(Wednesday, 28-12-2022)

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) What is COPP ?
- (b) What do you mean by NDA ?
- (c) Write the role of CDSCO.
- (d) Give the functions of six-sigma.
- (e) What do you understand by SOP ?
- (f) What do you mean by GMP and CGMP ?
- (g) Write the functions of Drug Regulatory Authorities.
- (h) Write the functions of TQM.
- (i) Write the responsibilities of Technology Transfer Team.
- (j) What is meant by SU and RU ?

P.T.O.

WT

(2)

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2. Solve any *two* of the following :

2×10=20

- (a) Discuss pilot plant scale up consideration for liquid oral dosage form.
- (b) Explain regulatory requirements for NDA.
- (c) Describe methods of technology transfer in a Pharmaceutical Industry.

3. Solve any *seven* of the following :

7×5=35

- (a) Write about the approved regulatory bodies and agencies for technology transfer in India.
- (b) Explain in detail quality risk management.
- (c) Write the objectives and significance of scale up.
- (d) Describe the scope of WHO guidelines.
- (e) Discuss the role and responsibilities of R.A. Professionals.
- (f) Write a note on QbD.
- (g) Discuss the fundamentals of GLP.
- (h) Discuss the types of changes under SUPAC guidelines.
- (i) Write the reasons of Technology Transfer.

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DP—10—2022

FACULTY OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY

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

NOVEMBER/DECEMBER, 2022

PHARMACY PRACTICE

Paper BP703T

(Friday, 30-12-2022)

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

Time—Three Hours

Maximum Marks—75

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

(ii) Draw the diagrams wherever necessary.

(iii) Figures to the right indicate full marks.

1. Answer the following questions :

10×2=20

- (a) Write the role of clinical Pharmacist.
- (b) Enlist points involved in medication order.
- (c) Write need of medication history interview.
- (d) Define ambulatory patient. Enlist different types of ambulatory patient services.
- (e) Write functions of hospital pharmacy.
- (f) Define hospital. Enlist different services available in hospital.
- (g) Enlist requirements for the maintenance of records of drug store in community pharmacy.
- (h) Write the objectives of hospital formulary system.
- (i) Give the objectives of drug information services.
- (j) Write the advantages of planning of budget.

P.T.O.

WT

(2)

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2. Answer the following (any *two*) :

2×10=20

- (a) Discuss in detail about classification of hospital on the basis of clinical and non-clinical orientation with role of administration.
- (b) Define inventory management with its advantages and disadvantages and explain in detail about techniques in inventory management.
- (c) Write in detail about composition, function and role of pharmacy therapeutic committee in drug safety.

3. Answer the following (any *seven*) :

7×5=35

- (a) Explain the procedure for distribution of controlled drug.
- (b) Explain factors affecting on therapeutic drug monitoring.
- (c) Define material management. Write the functions of material management.
- (d) Explain steps involved in patient counseling.
- (e) Write contents and organization of hospital formulary.
- (f) Write mechanism of pharmacokinetic drug interaction.
- (g) Explain the various laboratory tests used in urine analysis.
- (h) Define ADQ and classify it with example.
- (i) Explain the role of pharmacist in community health education.

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DP—14—2022

FACULTY OF SCIENCE AND TECHNOLOGY

B. Pharm (Seventh Semester) EXAMINATION

JANUARY, 2023

NOVEL DRUG DELIVERY SYSTEM

Paper—(BP 704-T)

(Wednesday, 04-01-2023)

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 answer with neat sketch wherever necessary.

1. Solve the following :

10×2=20

(a) Give the applications of monoclonal antibodies.

(b) Define Neosomes.

(c) Give the advantages of Nanoparticles.

(d) List out the advantages and disadvantages of Implantable drug delivery system.

(e) Give the ideal properties of polymers.

(f) Describe ocuserts.

(g) Define Gastroretentive dry delivery system.

(h) Give the concept of mucoadhesion.

(i) What are metered dose Inhalers ?

(j) Define Transdermal dry delivery system.

P.T.O.

WT

(2)

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2. Solve any *two* of the following : 2×10=20
- (a) Describe the various approaches to formulate dissolution and diffusion based controlled release drug delivery system.
 - (b) Explain in brief the evaluation of TDDS.
 - (c) Explain briefly the principle and design of floating type of gastro-retentives D.D.S.
3. Solve any *seven* of the following : 7×5=35
- (a) Define microencapsulation. List out the advantages and disadvantages of microencapsulation.
 - (b) Describe the basic components of Transdermal drug delivery system.
 - (c) Write advantages, disadvantages and application of ophthalmic drug delivery system.
 - (d) Write about reservoir and matrix type of controlled release formulations.
 - (e) How intraocular barriers can be overcome ?
 - (f) Discuss in detail about Non-erodible inserts.
 - (g) Define liposomes. Explain any *one* method of preparation of liposomes.
 - (h) Write a short note on buccal drug delivery system.
 - (i) Discuss the factors affecting permeation through skin.

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