

D. Pharm
AY-2024-2025

All Mid Term Question Paper

(Practical + Theory)

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. I
Batch A

Subject Code: ER20-11P

Duration: 3 Hrs.

Subject Name: Pharmaceutics

Maximum Marks: 80

Roll No. _____

1. Synopsis

10

- A. Liquid dosages for are divided into -----
- B. Ball mill is working on principle of -----
- C. Write the type of capsule -----
- D. 1ST Indian pharmacopoeia comes in -----
- E. Who is the father of pharmacy.
- F. Write the one example of simple syrup-----
- G. Write the one example of emulsion -----
- H. Write the one example of suspension -----
- I. Write the quantity of sucrose amount in 100 ml syrup according to IP
- J. What is the amount of potassium iodide is take for make iodide solution

2. Experiment

50

Aim: To prepare and performance the practical of simple syrup IP

(30)

Aim: To prepare and submit the preparation of iodine solution

(20)

3. Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. II Year
Batch A

Subject Code: ER20-11P
Subject Name: Pharmaceutics
Roll No. _____

Duration: 3 Hrs.
Maximum Marks: 80

1. Synopsis

10

- A. Liquid dosages for are divided into -----
- B. Ball mill is working on principle of -----
- C. Write the type of capsule -----
- D. 1ST Indian pharmacopoeia comes in -----
- E. Who is the father of pharmacy?
- F. Write the one example of simple syrup-----
- G. Write the one example of emulsion -----
- H. Write the one example of suspension -----
- I. Write the quantity of sucrose amount in 100 ml syrup according to IP
- J. What is the amount of potassium iodide is take for make iodide solution

2. Experiment

50

Aim: To prepare and performance the practical of simple syrup IP

Aim: To prepare and submit the preparation of iodine solution

(20)

3.Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I Mid-Term Examination (2024–25)
Diploma in Pharmacy

Subject: Pharmaceutics (ER20-11)T

Duration: 90 Min

Maximum Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Answer all the questions: (T/F and Blanks) [10×01=10]

10marks

- a) What is full form of IP.....
- b) Hammer mill is working on the principle of _____
- c) Full form of BP.....
- d) Full form of USP
- e) Indian pharmacopoeia First edition was comes in -----
- f) Indian pharmacopoeia eight edition was comes in
- g) Ball mill is worked on the principle of
- h) Write the amount of sugar according to IP which take in process of making simple syrup.....
- i) Write the one mixing machine name
- j) Write the one size separation machine name

Section B: Attempt any 5 out of 6 each carry 3 marks

[05×03=15] marks

1. A Write about Indian pharmacopoeia.
2. What is pharmaceutical aids
3. What do you mean by unit operations.
4. What do you mean by size separation
5. What do you mean by size reduction
6. What do you mean by preservative

Section C: Attempt any 3 out of 4 each carry 05 marks

[03×05=15] marks

1. A Write about dosage form?
2. Write about tablet and their classification
3. Write about capsule and their classification
4. Write about oral preparation.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II Mid-Term Theory Examination (2024–25)
Diploma in Pharmacy I year

Subject Name: Pharmaceutics

Subject Code:(ER 20 11T)

Duration: 90 Min Roll No:_____

Maximum Marks: 40

Note:

- 1.The question paper is divided into three sections A, B, & C.**
- 2.Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Attempt all the questions: (T/F and Blanks)

[10×01=10 marks]

- a) Write the ball mill principle -----
- b) Write the Hammer mill principle -----
- c) How many types of emulsions -----
- d) How many types of liquid doses form-----
- e) Write the Indian pharmacopeia seventh edition -----
- f) Write the full form of IP-----
- g) Rubber products are used as packaging material. T/F
- h) Martindale is a extra pharmacopoeia. T/F
- i) Write the types of tablet-----
- j) Write the full form of GMP-----

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks.

[05×03=15marks]

- a) What do you mean by packaging material?
- b) What do you mean by preservative?
- c) Write the working and definition of hammer mil
- d) Write the definition of ball mill and its working principle
- e) What do mean by size separation?
- f) What do you mean by size reduction?

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03x05=15marks]

- a) Describe the dosage form and type of tablets.
- b) Describe the types of emulsion.
- c) What do you mean by filtration? Write the theory of filtration
- d) What do you mean by extraction write classification also.

MOTHERHOOD UNIVERSITY, ROORKEE
III Mid-Term Theory Examination (2024–25)
Diploma in Pharmacy I year

Subject Name: Pharmaceutics

Subject Code:(ER 20 11T)

Duration: 90 Min Roll No: _____

Maximum Marks:40

Note:

- 1.The question paper is divided into three sections A, B, & C.**
- 2.Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Attempt all the questions: (T/F and Blanks) [10×01=10 marks]

- a) Write the ball mill principle -----
- b) Write the Hammer mill principle -----
- c) How many types of emulsions -----
- d) Rubber products are used as packaging material. T/F
- e) Martindale is a extra pharmacopoeia. T/F
- f) Write the types of tablets-----
- g) Write the full form of GMP-----
- h) What is full form of IP.....
- i) Full form of BP.....
- j) Write the one mixing machine name

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks.

[05×03=15marks]

- a) What do you mean by packaging material?
- b) What do you mean by preservative?
- c) Write the working and definition of hammer mill
- d) What is pharmaceutical aids
- e) What do you mean by unit operations.
- f) What do you mean by size separation

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03x05=15marks]

- a) Write about tablet and their classification
- b) Write about capsule and their classification
- c) What do you mean by filtration? Write the theory of filtration
- d) What do you mean by extraction write classification also.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARMA-1ST YEAR
Batch A

Subject Code: ER20-12P

Subject Name: Pharmaceutical chemistry

Roll No. _____

Duration: 3 Hrs.

Maximum Marks: 80

1 Synopsis

10

1. Define anemia?
2. Define accuracy.
3. The apparatus used for limit test of sulphate is _____.
4. Write the name of water soluble vitamins_____.
5. The Pink Colour Of Phenolphthalein Is In – Acidic Medium/ Basic Medium.
6. Write the two example of antacids_____.
7. Write the uses of antacid_____.
8. Full form of RBC ,WBC_____.
9. Write the two Example Of Haematinics_____.
10. Ammonium citrate is an example of _____.

2 Experiment

50

Aim: To perform the limit test for chlorides. (30)

Aim: To study the glassware which are used in chemistry laboratory. (20)

3 Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. - (I Year)
Batch- A

Subject Code: ER20-12P

Subject Name: Pharmaceutical Chemistry

Roll No. _____

Duration: 3 Hrs.

Maximum Marks: 80

1.Synopsis

[10×01 = 10marks]

1. Write The Full Form Of IUPAC_____.
2. The Prefix For Oxygen Heteroatom Is _____.
3. The Prefix For Nitrogen Heteroatom Is _____.
4. The color of cylinder in which carbon dioxide is stored _____.
5. Write any one example of general anesthesia_____.
6. Drug that mimic the action of sympathetic system is_____.
7. Write the name of sympathetic neurotransmitter_____.
8. Define anemia ?
9. Write the full form of RBC and WBC .
10. Write the name of fat soluble vitamins_____.

2. Experiment

50

Aim: To perform the identification test for boric acid.

(30)

Aim: To perform the limit test for heavy metals.

(20)

3. Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I Mid-Term Examination (2024–25)
Diploma in Pharmacy(1st year)
Subject-Pharmaceutical chemistry(ER20-12T)

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Answer all the questions: (T/F and Blanks) [1×10=10]

10marks

1. Define anemia?
2. Define accuracy.
3. The apparatus used for limit test of sulphate is _____.
4. Write the name of water soluble vitamins_____.
5. The Pink Colour Of Phenolphthalein Is In – Acidic Medium/ Basic Medium.
6. Write the two example of antacids_____.
7. Write the uses of antacid_____.
8. Full form of RBC ,WBC_____.
9. Write the two Example Of Haematinics_____.
10. Ammonium citrate is an example of _____.

Section B: Attempt any 5 out of 6 each carry 3 marks

03 marks

1. Define anemia .Write the physical properties ,storage conditions and uses of Ferrous fumarate.
2. Define pharmaceutical chemistry and write the uses of ferrous sulphate.
3. Write the molecular formula of ferrous sulphate ,magnesium hydroxide and aluminium hydroxide.
4. Define accuracy and precision .
5. Define limit test of chlorides .
6. Define gastro-intestinal agents and antacid ..

Section C: Attempt any 3 out of 4 each carry 05 marks

05 marks

1. Write a brief note on sources of impurities in formulations.
2. Define limit tests of chlorides and sulphate in details.
3. Define pharmaceutical chemistry and write scope and objectives .
4. Define acid-base titration and explain the theories of acid-base titration.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II- Mid-Term Theory Examinations (2024–25)
Diploma in Pharmacy I year

Subject Name: Pharmaceutical Chemistry

Subject Code: ER20-12T

Roll No: _____

Duration: 90 Min

Maximum Marks: 40

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Attempt all the questions: (T/F and Blanks)

[10×01=10 marks]

- a) Write The Full Form Of IUPAC_____.
- b) The Prefix For Oxygen Heteroatom Is _____.
- c) The Prefix For Nitrogen Heteroatom Is _____.
- d) Draw the structure of FURAN.
- e) Draw The Structure Of PYRIDINE.
- f) The color of cylinder in which carbon dioxide is stored _____.
- g) Write any one example of general anesthesia_____.
- h) Drug that mimic the action of sympathetic system is_____.
- i) Write the name of sympathetic neurotransmitter_____.
- j) Define Anti-depressants drugs.

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks.

[05×03=15marks]

- a) Explain in brief about oxygen as medicinal gas.
- b) Define sedative and hypnotics.
- c) Define Antipsychotics and Anticonvulsants drugs.
- d) Define cholinergic drugs and write any two examples.
- e) Write the difference between CNS and ANS .
- f) Write the chemical name ,uses ,storage condition of NOR –EPINEPHRINE.

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03x05=15marks]

- a) Write the physical properties ,pharmaceutical formulations, and uses of Calcium Carbonate and Oxygen.
- b) Define Sedative and Hypnotics with Classification.
- c) Write the chemical name ,chemical structure, mode of action ,stability and storage condition of Dopamine and Propranolol.
- d) What is Sympathomimetics agents and write the classification in details?

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
III Mid-Term Examination (2024–25)
Diploma in Pharmacy(1st year)
Subject-Pharmaceutical chemistry(ER20-12T)

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Answer all the questions: (T/F and Blanks) [1×10=10]

10marks

- a) Write The Full Form Of IUPAC_____.
- b) The Prefix For Oxygen Heteroatom Is _____.
- c) The Prefix For Nitrogen Heteroatom Is _____.
- d) Write the name of water soluble vitamins_____.
- e) The Pink Colour Of Phenolphthalein Is In – Acidic Medium/ Basic Medium.
- f) Write the two example of antacids_____.
- g) Write the uses of antacid_____.
- h) Define accuracy.
- i) Define anemia?
- j) Ammonium citrate is an example of _____.

Section B: Attempt any 5 out of 6 each carry 3 marks

03 marks

- a) Define anemia and Anti-hypertensive agents.
- b) Define diuretics and hypoglycemic agents.
- c) Define Anti-arrhythmic drugs and write two example
- d) Explain in brief about oxygen as medicinal gas.
- e) Define sedative and hypnotics.
- f) Define Antipsychotics and Anticonvulsants drugs.

Section C: Attempt any 3 out of 4 each carry 05 marks

05 marks

- a) Write a brief note on sources of impurities in formulations.
- b) Write the physical properties ,pharmaceutical formulations, and uses of Calcium Carbonate and Oxygen.
- c) Define pharmaceutical chemistry and write scope and objectives .
- d) What is hypoglycemic agents and write the classification of diuretics.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. 1st Year
Batch A

Subject Code: ER 20 – 13P

Subject Name: Pharmacognosy

Roll No. _____

Duration: 3 Hrs.

Maximum Marks: 80

1.Synopsis **10**

- A. Define Pharmacognosy.
- B. What is a crude drug.
- C. Define Adulteration.
- D. Define Alkaloids.
- E. Biological source of clove.
- F. Uses of Liquorice.
- G. Morphological characteristics of fennel.
- H. Morphological source of Coriander.
- I. Morphological characteristics of Senna.
- J. Uses of Ajwaine.

2. Experiment **50**

(Major Practical)

Aim: To perform the physical & chemical test for evaluation of Asafoetida. (30)

(Minor Practical)

Aim: To study the morphological characteristics of Senna. (20)

3.Viva - Voce **10**

4. Practical Record **10**

MOTHERHOOD UNIVERSITY, ROORKEE
II-MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. 1st Year
Batch A

Subject Code:ER 20 – 13P
Subject Name: Pharmacognosy
Roll No. _____

Duration: 3 Hrs.
Maximum Marks: 80

1.Synopsis **10**

- A. Define sources of crude drugs.
- B. Define Pharmacognosy.
- C. Define Adulteration.
- D. Biological source of clove.
- E. Uses of Liquorice.
- F. Define Alkaloids.
- G. Define carminative.
- H. Morphological source of Coriander.
- I. Morphological characteristics of Senna.
- J. Uses of Ajwaine.

2. Experiment **50**

(Major Practical)

Aim: To perform the physical & chemical test for evaluation of Black catechu. (30)

(Minor Practical)

Aim: To study the morphological characteristics of Isapgulla. (20)

3.Viva - Voce **10**

4. Practical Record **10**

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I Mid-Term Examination (2024-25)
Diploma in Pharmacy(1st year)
SUBJECT: PHARMACOGNOSY (ER20-13T)

Duration: 90 Min
Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

1. The question paper is divided into three sections A, B, & C.
2. Do not write anything on the question paper.
3. Students must attempt all the questions in serial order.

SECTION-A

I. Answer all the questions: [1×10=10 marks]

- | | |
|--|-----|
| a) Charak is known as father of Ayurveda. | T/F |
| b) Father of medicine is Hippocrates | T/F |
| c) Father of Pharmacognosy is Dioscorides. | T/F |
| d) Study of crude drugs occur in pharmacology. | T/F |
| e) Unorganized drug means having a cellular part. | T/F |
| f) Talc is an example of mineral drug. | T/F |
| g) Crude is obtained from natural sources | T/F |
| h) Morphine, Nicotine is an example of Alkaloids. | T/F |
| i) The term MateriaMedica is used for the subject Pharmacognosy. | T/F |
| j) The term Pharmacognosy firstly introduce by Schmidt. | T/F |

Section B: Attempt any 5 out of 6 each carry 3 marks [3X5=15marks].

- a) Define the vein-islet number.
- b) Explain the term of crude drug.
- c) Write the advantages and disadvantages of pharmacological classification of crude drugs.
- d) Define adulteration.
- e) Write a short note on occurrence and distribution of Alkaloids.
- f) What is organoleptic evaluation of crude drug.

Section C: Attempt any 3 out of 4 each carry 05 marks [5X3=15marks]

- a) What are the scope and development of Pharmacognosy.
- b) Explain in detail about Morphological classification of crude drug with example.
- c) Explain in detail about deliberate adulteration.
- d) Write a classification of crude drugs.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II Mid-Term Theory Examination (2024–25)
Diploma in Pharmacy I year

Subject Name: Pharmacognosy

Subject Code: ER 20-13 T

Roll No: _____

Note:

Duration: 90 Min

Maximum Marks: 40

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Attempt all the questions:

[10×01=10 marks]

- a) Cardiotonic means-----
- b) Astringent means -----
- c) Diuretics means-----
- d) Biological source of shark liver oil -----
- e) laxative means -----
- f) Antitussive means -----
- g) Organoleptic means-----
- h) The Word Aroma means -----
- i) Carminative means -----
- j) Study of crude drug -----

SECTION-B

II. Attempt any 5 out of 6 each carrying 3 marks.

[05×03=15marks]

- a) Write about alkaloids with examples.
- b) Write about glycosides with examples
- c) Write about volatile oils with examples
- d) Define laxatives and Carminatives with examples
- e) Define Antiseptic and disinfectant with examples
- f) Write about drugs acting on the nervous system

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03x05=15marks]

- a) Write about fibers used as a surgical dressing cotton silk, and wools.
- b) Write about digestive enzymes with examples.
- c) Write about the scope and development of pharmacognosy
- d) Write about the classification of crude drugs.

All the best

MOTHERHOOD UNIVERSITY, ROORKEE
III Mid-Term Theory Examination (2024–25)
Diploma in Pharmacy I year

Subject Name: Pharmacognosy

Subject Code: ER 20-13 T

Roll No: _____

40

Note:

- 1. The question paper is divided into three sections: A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

Duration: 90 Min
Maximum Marks:

SECTION-A

I. Attempt all the questions: [10×01=10 marks]

- a) Cardiotoxic means-----
- b) Astringent means -----
- c) Laxative means -----
- d) The Word Aroma means -----
- e) Carminative means -----
- f) Study of crude drug -----
- g) Father of medicine is Hippocrates T/F
- h) Father of Pharmacognosy is Dioscorides. T/F
- i) Study of crude drugs occur in pharmacology. T/F
- j) Morphine, Nicotine is an example of Alkaloids. T/F

SECTION-B

II. Attempt any 5 out of 6 each carrying 3 marks. [05×03=15marks]

- a) Write about alkaloids with examples.
- b) Write about glycosides with examples
- c) Write about volatile oils with examples.
- d) Define adulteration.
- e) Write the advantages and disadvantages of the pharmacological classification of crude drugs.
- f) What is the organoleptic evaluation of the crude drug?

SECTION-C

III Attempt any 3 out of 4, each carry 05 marks. [03×05=15marks]

- a) Write about fibers used as a surgical dressing: cotton, silk, and wool.
- b) Write about the classification of crude drugs.
- c) What is the scope and development of Pharmacognosy?
- d) Explain in detail about deliberate adulteration.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. 1st Year
Batch A

Subject Code: ER 20 – 14P

Subject Name: Human Anatomy and Physiology

Roll No. _____

Duration: 3 Hrs.

Maximum Marks: 80

1.Synopsis

10

- A. Define Cell.
- B. Define Tissue.
- C. Full form of RBC.
- D. Full form of WBC.
- E. Define Heart function.
- F. Define Kidney function.
- G. Define B.P.
- H. Full form of D.N.A.
- I. Full form of R.N.A.
- J. The Universal acceptor blood type is_____.

2. Experiment

50

(Major Practical)

Aim: To study the human Respiratory system.

(30)

(Minor Practical)

Aim: Determination of bleeding time and clotting time.

(20)

3.Viva - Voce

10

4. Practical Record

10

MOTHERHOOD UNIVERSITY, ROORKEE II
II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D.PHARM. I Year
Batch B

SubjectCode: ER20-14P

Subject Name: Human Anatomy and Physiology

Roll No. _____

Duration:3 Hrs.

MaximumMarks:80

1. Synopsis 10

- A. DefineCell.
- B. Fullform ofWBC.
- C. DefineHeartfunction.
- D. DefineKidneyfunction.
- E. DefineB.P.
- F. Fullform of D.N.A.
- G. Fullform of R.N.A.
- H. DefineTissue.
- I. Fullform ofRBC.
- J. TheUniversalacceptorbloodtypeis_____.

2. Experiment 50

(MajorPractical)

Aim:TostudythehumanRespiratorysystem. (30)

(MinorPractical)

Aim:Determinationofbleedingtimeandclottingtime. (20)

3. Viva-Voce 10

4. Practical Record 10

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I Mid-Term Examination (2024–25)
Diploma in Pharmacy
Subject: Human Anatomy & Physiology/ER20-14T

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Answer all the questions: (T/F and Blanks) [10×01=10]

10marks

- a) Cell is the functional unit of the body. (T/F)
- b) Mitochondria are known as _____ of the cell.
- c) White fibrous is inelastic in nature. (T/F)
- d) Voluntary Muscles are under the control of will power. (T/F)
- e) Average Life span of RBC is _____ days.
- f) Clotting Factor I is _____.
- g) WBC full form is _____
- h) RBC is Red due to the presence of _____ pigment.
- i) Neutrophils are the types of WBC. (T/F)
- j) The Average clotting time is 5-15 minutes. (T/F)

Section B: Attempt any 5 out of 6 each carry 3 marks

[05×03=15] marks

1. Draw neat & clean diagram of the Mitochondria.
2. Write a note on Mitosis.
3. Give composition of the Blood and Types of Blood.
4. Write a note on Agranulocytes.
5. Name the various Clotting Factors
6. Define Lymph its Composition and diagram.

Section C: Attempt any 3 out of 4 each carry 05 marks

[03×05=15] marks

1. Describe in the detail Mechanism of Blood Clotting.
2. Classify Tissues, Explain with diagram & functions of Muscular Tissues or Nervous Tissues.
3. Draw the diagram of Cell. Enumerate it & write their functions.
4. Name the various parts of Urinary System. Structure and Functions of the Kidney.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II Mid-Term Theory Examination (2024–25)
Diploma in Pharmacy I year

Subject Name: Human Anatomy & Physiology

Subject Code: ER20-14T

Roll No: _____

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

Duration: 90 Min

Maximum Marks: 40

SECTION-A

I. Answer all the questions: (Fill in the Blanks)

[10×01=10 marks]

- a) There are _____ lobe in the Brain.
- b) _____ nerve help in the Vision.
- c) There are _____ number of pair of the Cranial Nerves.
- d) _____ is the smallest bone in the human body.
- e) ANS means _____
- f) CNS means _____
- g) The Eye Ball consists of _____ layers.
- h) The rate of Respiration in the adults' _____ per minutes.
- i) Cycle of Respiration consists of _____ Phases.
- j) Voice Box is also known as _____
- k) Myocardium means _____

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks

[05×03=15marks]

- a) Write a note on the Mechanism of Respiration.
- b) Write a note on the Physiology of the Heart.
- c) Describe any organ of special sense.
- d) Write in the detail about CNS.
- e) Name the cranial nerves with type and functions.
- f) Explain the mechanism of the Sight.

SECTION-C

III. Attempt any 3 out of 4 each carry 05 marks

[03×05=15marks]

- a) Draw a well labeled the diagram of Respiratory System.
- b) Explain the Physiology of hearing.
- c) Draw and Labeled the Eye or Skin.
- d) Draw a well labeled the diagram of the Heart.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
III Mid-Term Examination (2024-25)
Diploma in Pharmacy
HAP (ER 20-14T)

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Roll No: _____

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Answer all the questions: (T/F and Blanks) [1×10=10] 10marks

- a) CNS _____
- b) Diastole means _____
- c) Life span of RBC is ____ days.
- d) Normal clotting Time is _____
- e) CNS means _____
- f) Pulmonary Vein contains _____ blood.
- g) Liver is the largest glad of the body. (True/False)
- h) Cerebrum is the largest part of the Brain. (True/False)
- i) The malleus, incus & stapes are auditory ossicles. (True/False)
- j) Tendons joining Muscles with bones. (True/False)

Section B: Attempt any five out of six each carry 03 marks (05×03=15 marks)

- a) Name the various parts of the digestive system.
- b) Draw a neat & clean diagram of respiratory system.
- c) Write a note on Respiratory Physiology.
- d) Brief about the physiology of circulatory system.
- e) Write a note on special sense organ.
- f) Write a note on Mid Brain.

Section C: Attempt any three out of four each carry 05 marks s(03×05=15 marks)

- a) Describe briefly about the Joints.
- b) Explain in detail about CVS or CNS
- c) Explain in detail about Peripheral Nervous System.
- d) Describe in detail male reproductive system or Female reproductive system.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARMA-1ST YEAR
Batch A

Subject Code: ER20-15P

Subject Name: Social pharmacy

Roll No. _____

Duration: 3 Hrs.

Maximum Marks: 80

1 Synopsis

10

1. Define social pharmacy?
2. What do you understand by health?
3. FIP.....stands for?
4. SDGs.....stand for?
5. WHO.....stands for?
6. Define health?
7. Define micronutrients?
8. IUD.....stands for?
9. Define physical health.
10. Write down the types of health.

2 Experiment

50

Aim: To study in details about hand washing technique (30)

Aim: To study in details about product used during menstruation. (20)

3 Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25

D. PHARM. - (Ist Year)

Subject Code: ER 20-15P
Subject Name: Social Pharmacy
Roll No. _____

Duration: 3 Hrs.
Maximum Marks: 80

1.Synopsis

[10×01 = 10marks]

- A. Write Full form of WHO.....
- B. What is Nutraceuticals ?
- C. Full form of NHM.....
- D. Define Immunization?
- E. Full form of STDs.....
- F. Write their name of Health Dimensions?
- G. Full form of HMOs.....
- H. Define Macronutrients?
- I. Ascorbic Acid are also knowns as ,.....
- J. Define Social Pharmacy?

2. Experiment

50

Aim: To study the Role of Pharmacists in disaster management .

(30)

Aim: To study about oral health and hygiene.

(20)

3.Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES

I Mid-Term Examination (2024–25)

Diploma in Pharmacy (1st year)

Social pharmacy (ER 20-15T)

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Answer all the questions: (T/F and Blanks)

1×10= 10marks

1. Define social pharmacy?
2. What do you understand by health?
3. FIP.....stands for?
4. SDGs.....stand for?
5. WHO.....stands for?
6. Define Demography?
7. What is fertility?
8. IUD.....stands for?
9. What is Birth rate?
10. ASMR.....stands for?

Section B: Attempt any five out of six each carry 03 marks

05x03=15 marks

1. Write the importance of family planning?
2. Write about dimensions of health ?
3. Write a short note on health indicator ?
4. Write a short note on oral contraceptives?
5. What are importance of mother and child health?
6. Discus about national health programs?

Section C: Attempt any three out of four each carry 05 marks

03x05=15 marks

1. What is fertility,write about factors affecting fertility?
2. Discus in detail about breastfeeding ?
3. Write in detail about the scope and current status of social pharmacy in india?
4. Briefly describe the millennium development goals?

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II Mid-Term Theory Examination (2024–25)
Diploma in Pharmacy I year

Subject Name: Social Pharmacy

Subject Code: ER 20-15T

Roll No: _____

Note:

Duration: 90 Min
Maximum Marks: 40

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Attempt all the questions:

[10×01=10 marks]

- a) Define Epidemiology?
- b) WHO Stands
- c) Define Pandemic?
- d) Explain balanced diet?
- e) Write about Micro-organism?
- f) What is Micronutrients ?
- g) Define Endemic?
- h) Write about Water soluble Vitamins with their name.
- i) Define Micro biology?
- j) NAM stands.....

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks.

[05×03=15marks]

- a) Explain the adulteration of food?
- b) Write about Food supplements.
- c) Write the details Note on Communicable Disease ?
- d) Describe a Respiratory infection?
- e) Write Short Note on National health system .
- f) Brief Discussion of adulteration of foods?

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03x05=15marks]

- a) Write detail note on communicable disease.
- b) Describe nutraceuticals along with classification ?
- c) Write the Causative agents, Epidemiology and clinical presentation of chicken pox ,measles, mumps ?
- d) Explain Food poisoning?

MOTHERHOOD UNIVERSITY, ROORKEE
III Mid-Term Theory Examination (2024-25)
Diploma in Pharmacy(I year)

Subject Name: Social Pharmacy

Subject Code: ER 20-15T

Roll No: _____

Duration: 90 Min

Max. Marks: 40

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

Section-A

I. Attempt all the questions:

[1×10=10 marks]

- a) Define Demography?
- b) Define Arthropod borne Infection?
- c) Define Pandemic?
- d) Explain balanced diet?
- e) Write about Micro-organism?
- f) Define Water pollution?
- g) Define Immunization?
- h) Write about Water soluble Vitamins with their name.
- i) Define Micro biology?
- j) What is intestinal Infection?

Section B: Attempt any 5 out of 6 each carry 3 marks [3X5=15marks]

- a) Explain Family Planning?
- b) Write about environmental pollution?
- c) Write about various dimension of health ?
- d) Describe types of immunity?
- e) Write the names of communicable diseases?.
- f) Write the names of Respiratory infection diseases?.

Section C: Attempt any 3 out of 4 each carry 05 marks [5X3=15marks]

- a) Write detail note on Introduction food safety.
- b) Explain Demography and family planning?
- c) Explain any two types of Respiratory infections diseases ?
- d) Explain Sewage and solid Waste disposal?

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. IInd year
Batch A

Subject Code: ER20-21P

Duration: 3 Hrs.

Subject Name: Pharmacology

Maximum Marks: 80

Roll No. _____

1 Synopsis	10
1. Define Bioavailability?	
2. What is chemotherapy?	
3. Define pharmacology?	
4. Define synapse?	
5. Define bradycardia?	
6. Define pharmacodynamics?	
7. Write down the full form of ADME.	
8. Write the Full form of IV and IM.	
9. Write down the advantage of oral route.	
10. Write the Bioavailability of oral route.	
2 Experiment	50
Aim: Study of common laboratory animals.	(30)
Aim: Introduction to experimental pharmacology.	(20)
3 Viva-Voce & Practical Record	20

MOTHERHOOD UNIVERSITY, ROORKEE
II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM.2nd year.
Batch-A

Subject Code: ER20-21P
Subject Name: Pharmacology
Roll No. _____

Duration: 3 Hrs.
Maximum Marks: 80

1 Synopsis

10

1. Laxatives and Purgatives used for?
2. High ceiling diuretics used in condition.....?
3. Give two name of drug used in glaucoma
4. Define the term ED50?
5. Give a example of HMG-CoA Reductaseinhibitors ?
6. P2 Y12 ADP receptor inhibit platelet aggregation (T/F)
7. Streptokinase is a example of Thrombolytic drugs(T/F)
8. Theophylline is a example of Methylxanthines(T/F)
9. Give an example of H₂Histamin receptor blockers?
10. Promethazine is an example of Anti-emetics(T/F)

2 Experiment

50

Major Practical

(30)

AIM: To study about theDifferent routes of drug administration in animals

Minor Practical

(20)

AIM: To study the anticonvulsant activity of phenytoin against maximal electro shock induced convulsion rats.

3 Viva-Voce & Practical Record

(20)

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES

I Mid-Term Examination (2024–25)

Diploma in Pharmacy(2nd year)

Pharmacology (ER 20-21T)

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Answer all the questions: (T/F and Blanks)

1×10= 10marks

1. Define Bioavailability?
2. What is chemotherapy?
3. Define pharmacology?
4. Define synapse?
5. Define bradycardia & tachycardia?
6. What is acetylcholinesterase?
7. Define neuron?
8. AcH.....stands for?
9. Who is the father of Indian pharmacology?
10. Treatment of myasthenia gravis usually started with-Donepezil/Neostigmine

Section B: Attempt any five out of six each carry 03 marks

05×03=15 marks

1. Write down the advantages and disadvantages of oral route?
2. Distinguish between pharmacokinetic and pharmacodynamics?
3. Write a brief note on factor affecting drug absorption?
4. Write a short note on cholinergic drugs ?
5. Write about neurohumoral transmission ?
6. Give the mechanism of action of cholinergic drugs?

Section C: Attempt any three out of four each carry 05 marks

03×05=15 marks

1. Describe various routes of drug administration ?
2. Give the definition and classification of cholinergic drugs?
3. Explain about synthesis and release of neurotransmitters?
4. Give the introduction and scope of pharmacology?

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II- Mid Term Theory Examination (2024–25)
Diploma in Pharmacy II year

Subject Name: Pharmacology

Subject Code: ER20-21T

Roll No: _____

Note:

Duration: 90 Min
Maximum Marks: 40

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Attempt all the questions:

[10×01=10 marks]

1. Myasthenia gravis is diagnosed using.....(Atropine/Edrophonium)
2. Short acting anticholinesterase drug is.....(Edrophonium/Donepezil)
3. Callinomimetics is not used in Partial heart block.(T/F)
4. Atropine can cause Mydriasis.(T/F)
5. Amphetamines is a class of Nootropic agents(T/F)
6. Define antidepressant?
7. ANXIOLYTICS is used for treatment the symptoms of anxiety (T/F)
8. Chlorpromazine is a antipsychotic drug(T/F)
9. Benzodiazepines are useful in Muscle spasms(T/F)
10. The wall of the heart is made up of Endocardium, myocardium,& Epicardium (T/F)

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks.

[05×03=15marks]

1. Classify Mydriatic drug with example?
2. Write a short note on Anticonvulsant agents?
3. Write a short note on Diuretics and classify it?
4. Give the classification of General Anesthetic with suitable example?
5. Write a short note on Anti-anginal drugs?

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03×05=15marks]

1. Write a short note on treatment of Glaucoma, with suitable example?
2. Define hypnotic and sedative and classify with suitable example?
3. Give the classification of antihypertensive drugs, Explain any one?
4. Explain the drugs used in Atherosclerosis?

MOTHERHOOD UNIVERSITY, ROORKEE
III-Mid Term Theory Examination (2024–25)
Diploma in Pharmacy II year

Subject Name: Pharmacology

Subject Code: ER20-21T

Roll No: _____

Duration: 90 Min

Maximum Marks: 40

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Attempt all the questions:

[10×01=10 marks]

1. Which medicine is suitable for the treatment of Hypertension during pregnancy (Aliskiren/Hydralazine)
2. What are the side effects of taking Amlodipine (Cough/Edema)
3. Omeprazole (PPIs) has enzyme inhibitory activity (T/F)
4. Oxytocin release from Posterior lobe of Pituitary gland. (T/F)
5. Somatotropin hormone controls the growth of body (T/F)
6. Define Anti-Diarrhoeal drugs ?
7. Oxytetracycline is used for treatment of the symptoms of anxiety (T/F)
8. Thiourea derivatives reduce the synthesis of thyroxine (T/F)
9. Calcitonin is a 32 amino acid single chain polypeptide (T/F)
10. What diseases are treated with penicillin (T/F)

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks.

[05×03=15marks]

1. Classify Mydriatic drug with example?
2. Write a note on Hematinic agent?
3. Write a short note on Peptic ulcer?
4. Briefly describe anterior and posterior pituitary hormones?
5. Classify the anti-HIV agents?
6. Define biological products with examples?

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03x05=15marks]

1. Write short note on recombinant human erythropoietin?
2. Write a short note on the following-
 - i) Cotrimoxazole
 - ii) Anti-amoebic drugs
3. Define and classify Autacoids with suitable examples?
4. Classify Antidiuretics with suitable examples and write the Pharmacological action of thiazide diuretics?

BEST OF LUCK

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. II
Batch A

Subject Code: ER20-22P

Subject Name: Community pharmacy and management

Roll No. _____

Duration: 3 Hrs.

Maximum Marks: 80

1. Synopsis

10

- A. Inscription is the part of community pharmacy. T/F
- B. Subscription is the part of prescription. T/F
- C. Superscription is the part of community pharmacy
- D. Write the part of prescription
- E. Define verbal communication
- F. Write the type of communication
- G. Full form of GPP
- H. Dispensing is the part of -----
- I. What is the concept of OTC ----_-----
- J. Write the two OTC drug name -----

2. Experiment

50

Aim: preparation of dispensing label and auxiliary label for the prescribed medication
(20)

Aim: Handling of prescription with professional standards reviewing prescription checking for legal compliance incompleteness
(30)

3. Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. - (IInd Year)
Batch- B

Subject Code: ER 20-22P
Subject Name: Community Pharmacy and Management
Roll No. _____

Duration: 3 Hrs.
Maximum Marks: 80

1.Synopsis

[10×01 = 10marks]

- A. Define CRM?
- B. Write Full form of OTC?
- C. Define Patient Counselling?
- D. Full form of CRM.....
- E. Write symptoms of Hypertension?
- F. Define self medication?
- G. Write about hypertension?
- H. Symptoms of Sore throat?
- I. Define Diabetes?
- J. What is medical adherence?

2. Experiment

50

Aim: To study about counseling to patients with primary hypertension and education on the use of digital Blood pressure monitors. (30)

Aim: To provide counseling to simulated patients for GI disturbances (Nausea ,Vomiting) (20)

3.Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES

I Mid-Term Examination (2024–25)

Diploma in Pharmacy(2nd year)

Subject: Community pharmacy(ER20-22T)

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Answer all the questions: (T/F and Blanks) [1×10=10]

10marks

1. What is community pharmacy?
2. Who runs community pharmacy?
3. Define community pharmacist.
4. Health advice provided by_____.
5. Community pharmacies are commonly known as_____.
6. Full form of SOP.
7. Full form of GPP.
8. Define prescription.
9. Write down types of prescription.
10. Name the part of prescription.

Section B: Attempt any 5 out of 6 each carry 3 marks

03 marks

1. Write down the difference between verbal and non-verbal communication.
2. Define communication and write short note on written communication.
3. What are the various stages of patient counseling.
4. Write short note on Good Dispensing Practices.
5. Write the main objectives of community pharmacy.
6. Difference between main labels and auxiliary labels.

Section C: Attempt any 3 out of 4 each carry 05 marks

05 marks

1. Define the term Prescription. Discuss parts of a prescription in details.
2. What is communication? Discuss various Barriers to effective communication.
3. Define patient counselling. Write the benefits and stages of patient counselling.
4. Define dispensing errors, Prescription, SOPs and patient counseling.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II Mid-Term Theory Examination (2024–25)
Diploma in Pharmacy II year

Subject Name: Community Pharmacy and Management

Subject Code: ER 20-22T

Roll No:_____

Duration: 90 Min
Maximum Marks: 40

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Attempt all the questions:

[10×01=10 marks]

- a) Define Medication Adherence.
- b) Define OTC.
- c) Define Cash Book?
- d) Define Community Pharmacy management?
- e) Write full form of CRM?
- f) Define Day book?
- g) What is Procurement?
- h) Define Health Screening services in community Pharmacy?
- i) Define term self Medication.
- j) Define over the drug counter?

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks.

[05×03=15marks]

- a) Write the scope of Health Screening Service?
- b) Write SOP of Pharmacy Management.
- c) Write a Digital Health?
- d) Describe a short note on CPM?
- e) Describe the Pharmacy Design and Interiors.
- f) Write a Short Note on OTC?

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03x05=15marks]

- a) Write Role of Pharmacist in OTC Medication.
- b) Describe the Inventory Control Method?
- c) Write the Legal Requirements to Setup a community Pharmacy?
- d) Role of Pharmacist Promoting Safe practice during Self Medication?

MOTHERHOOD UNIVERSITY, ROORKEE
III Mid-Term Theory Examination (2024-25)
Diploma in Pharmacy(II year)

Subject Name: Community Pharmacy and Management

Subject Code: ER 20-22T

Roll No: _____

Duration: 90 Min

Max. Marks: 40

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

Section-A Attempt all the questions: [1×10=10 marks]

- a) Define Medication Adherence.
- b) Stands OTC.
- c) Define Cash Book?
- d) Define Community Pharmacy management?
- e) Write full form of CRM?
- f) Define Day book?
- g) What is Procurement ?
- h) Define Health Screening services in community Pharmacy?
- i) Define term self Medication .
- j) Define over the drug counter?

Section B: Attempt any 5 out of 6 each carry 3 marks [3X5=15marks]

- a) Write the scope of Health Screening Service?
- b) Write SOP of Pharmacy Management.
- c) Write a Digital Health?
- d) Describe a short note on CPM?
- e) Describe the Pharmacy Design and Interiors.
- f) Write a Short Note on OTC?

Section C: Attempt any 3 out of 4 each carry 05 marks [5X3=15marks]

- a) Write Role of Pharmacist in OTC Medication.
- b) Describe the Inventory Control Method?
- c) Write the Legal Requirements to Setup a community Pharmacy?
- d) Role of Pharmacist Promoting Safe practice during Self Medication?

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. II
Batch A

Subject Code: ER20-23P

Duration: 3 Hrs.

Subject Name: Biochemistry and clinical Pathology

Maximum Marks: 80

Roll No. _____

1 Synopsis

10

1. Glucose is_____.
2. Sucrose is _____.
3. Which disease caused by the deficiency of protein _____.
4. Write down the formula of carbohydrates.
5. The store house of energy in a cell is_____.
6. Chemical name of vitamin-A_____.
7. Write down the water soluble vitamins _____.
8. Formula of glucose is _____.
9. What is the another name of RBC_____.
10. What is lipid?

2 Experiment

50

Aim: To Identify the given sample of carbohydrates . (30)

Aim: To identify the given sample of Protein. (20)

3 Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. - (II Year)
Batch- A

Subject Code: ER20-23P

Subject Name: Biochemistry and clinical Pathology

Roll No. _____

Duration: 3 Hrs.

Maximum Marks: 80

1. Synopsis

[10×01 = 10marks]

1. What is the another name of WBC_____.
2. Full form of LDL_____.
3. Write down the name of BAD cholesterol _____.
4. _____is used to check Body Temperature.
5. Life span of WBC _____.
6. Write down the lipid soluble vitamins _____.
7. Write down the another name of WBC _____.
8. What is the another name of TCA cycle _____.
9. Glucose is_____.
10. Chemical name of vitamin C_____.

2. Experiment

50

Aim: To identify the given sample of carbohydrates.

(30)

Aim: To identify the given sample of Protein

(20)

3. Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I Mid-Term Examination (2024–25)
Diploma in Pharmacy(2nd year)
Subject: Biochemistry and Clinical Pathology (ER20-23T)

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

SECTION-A

I. Answer all the questions: (T/F and Blanks) [1×10=10]

10marks

1. Define biochemistry?
2. Define cell?
3. Who introduced the word, biochemistry?
4. The store house of energy in a cell is_____.
5. Define protein ?
6. Write down the formula of glucose.
7. What are fatty acid?
8. Write down the example of carbohydrates_____.
9. Define cell membrane?
10. Draw the structure of amino acid ?

Section B: Attempt any 5 out of 6 each carry 3 marks

03x05=15 marks

1. Define amino acid and polypeptides chain ?
2. Define carbohydrates and draw the structure of Glucose.
3. Explain the following tests of carbohydrates: 1. Molish test 2. Benedict test .
4. Give an account of four orders of protein structure?
5. Differentiate between Kwashiorkor and Marasmus diseases.
6. Define fatty acid and its classification.

Section C: Attempt any 3 out of 4 each carry 05 marks

05x03=15 marks

1. Define Lipids .Write their classification with example.
2. What are nucleic acid. Give the biological importance of nucleic acid. Give the difference b/w RNA & DNA?
3. Define carbohydrates and give their classification with example .
4. Define protein. Draw the structure of glucose and fructose.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II Mid-Term Theory Examination (2024–25)
Diploma in Pharmacy II year

Subject Name: Biochemistry and clinical Pathology

Subject Code: ER20-23T

Roll No: _____

Duration: 90 Min

Maximum Marks: 40

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Attempt all the questions: (T/F and Blanks)

[10×01=10 marks]

- a) Full form of NAD_____.
- b) Define metabolism.
- c) Define Glycolysis.
- d) What is the life span of WBC ?
- e) How many ATP molecules involved in Glycolysis cycle.
- f) Full form of DHAP.
- g) How many ATP molecules make in Glycolysis cycle.
- h) Write down the name of water soluble vitamins.
- i) Define Enzyme.
- j) Chemical name of vitamin B12

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks.

[05×03=15marks]

- a) Define micronutrients and lipodosis.
- b) What is gluconeogenesis and glycogenesis?
- c) Define function of water in the body.
- d) What are Enzymes? Describe about their medicinal importance.
- e) Define Catabolism And Anabolism.
- f) Write the Chemical Name Of Vitamin A, C, B9.

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03×05=15marks]

- a) Define carbohydrates and disease related to abnormal metabolism of carbohydrates.
- b) Define Glycolysis cycle pathway in details.
- c) Write a detailed note on vitamin B and vitamin C.
- d) Define vitamins and its classification.

ALL THE BEST

MOTHERHOOD UNIVERSITY ROORKEE
III Mid-Term Theory Examination (2024–25)
Diploma in Pharmacy II year

Subject Name: Biochemistry and clinical Pathology

Subject Code: ER20-23T

Roll No: _____

Duration: 90 Min

Maximum Marks: 40

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Attempt all the questions: (T/F and Blanks)

[10×01=10 marks]

- a) Full form of NAD_____.
- b) Define metabolism.
- c) Define Glycolysis.
- d) What is the life span of WBC ?
- e) How many ATP molecules involved in Glycolysis cycle.
- f) Define biochemistry?
- g) Define cell?
- h) Who introduced the word, biochemistry?
- i) The store house of energy in a cell is_____.
- j) Define protein ?

SECTION-B

II. Attempt any 5 out of 6 each carry 3 marks.

[05×03=15marks]

- a) Differentiate between Kwashiorkor and Marasmus diseases .
- b) Define function of water in the body.
- c) Define amino acid and polypeptides chain ?.
- d) Define Catabolism And Anabolism.
- e) Write the Chemical Name Of Vitamin A, C, B9.
- f) Define function of kidney and roles in short?

SECTION-C

III Attempt any 3 out of 4 each carry 05 marks.

[03x05=15marks]

- a) Define carbohydrates and disease related to abnormal metabolism of carbohydrates.
- b) Define Glycolysis cycle pathway in details.
- c) Define protein. Draw the structure of glucose and fructose.
- d) Define vitamins and function of liver ?

ALL THE BEST

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. II
Batch A

Subject Code: ER20-24P

Duration: 3 Hrs.

Subject Name: Pharmacotherapeutic

Maximum Marks: 80

Roll No. _____

1. Synopsis

10

- A. Myocardial infraction is the brain disease. T/F
- B. Congestive heart failure is the lungs disease. T/F
- C. Angina pactoris is the heart disease. T/F
- D. Normal range of blood pressure-----
- E. Normal Systolic blood pressure is-----
- F. Normal diastolic blood pressure is ----_-----
- G. Barbiturates used in -----
- H. Beta blockers used for treatment of -----
- I. Write two calcium channels blockers drug name -----
- J. Write the two drugs name which are used for treatment of thyroid -----

2. Experiment

50

Aim: To preparation and discuss about Hypertension and (SOAP) subjective objectives and assessment and plan (30)

Aim: To Preparation and discuss about angina pactoris and (SOAP) subjective objectives and assessment and plan (20)

3. Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. II
Batch A

Subject Code: ER20-24P
Subject Name: Pharmacotherapeutic
Roll No. _____

Duration: 3 Hrs.
Maximum Marks: 80

1. Synopsis

10

- A. Myocardial infraction is the brain disease. T/F
- B. Congestive heart failure is the lungs disease. T/F
- C. Angina pectoris is the heart disease. T/F
- D. Normal range of blood pressure-----
- E. Normal Systolic blood pressure is-----
- F. Normal diastolic blood pressure is ----_-----
- G. Barbiturates used in -----
- H. Beta blockers used for treatment of -----
- I. Write two calcium channels blockers drug name -----
- J. Write the two drugs name which are used for treatment of thyroid -----

2. Experiment

50

Aim: To preparation and discuss about Hypertension and (SOAP) subjective objectives and assessment and plan (30)

Aim: To Preparation and discuss about angina pectoris and (SOAP) subjective objectives and assessment and plan

(20)

3. Viva-Voce & Practical Record

20

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES

I Mid-Term Examination (2024–25)

Diploma in Pharmacy

Subject: Pharmacotherapeutic (ER 20-24) T

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Answer all the questions: (T/F and Blanks) [10×01=10]

10marks

- a) Write two drugs name which are used for treatment of hypertension
- b) Write the two drugs name of which are used for treatment of angina pactoris
- c) Full form of COPD.....
- d) Full form of MI
- e) Write two drug names of which are used for treatment for hyperlipidemia
- f) Write the drug name of which are used for treatment of COPD.....
- g) Write a Drug name of which are used for treatment of thyroid.....
- h) Write a Drug name of which are used for treatment of diabetes.....
- i) Write the drug name of which are used for treatment of epilepsy.....
- j) Write a Drug name of which are used for treatment of Parkinson

Section B: Attempt any 5 out of 6 each carry 3 marks

[05×03=15] marks

- a) Write the etio pathogenesis of hypertension?
- b) Write the pharmacological management of hyperlipidemia
- c) Write the pharmacological management of epilepsy
- d) Write the pharmacological management of congestive heart failure
- e) Write the pharmacological management of angina pactoris
- f) Write the pharmacological management of Parkinson

Section C: Attempt any 3 out of 4 each carry 05 marks

[03x05=15] marks

- a) Write etio pathogenesis of COPD.
- b) Write etio pathogenesis of hyperlipidemia.
- c) Write etio pathogenesis of epilepsy
- d) Write the etio pathogenesis of Parkinson.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II Mid-Term Theory Examination (2024-25)
Diploma in Pharmacy (II year)

Subject Name: Pharmacotherapeutics
Subject Code: ER 20-24 T
Roll No: _____

Duration: 90 Min
Max. Marks: 40

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

Section-A

I. Attempt all the questions:

[10×1=10 marks]

- a) name of a drug used for angina pactoris
- b) Angina pactoris is a lung disease. T/F
- c) Steroids are used for the treatment of epilepsy. T/F
- d) Barbiturates are used for treatment of CHF. T/F
- e) COV2 causative agent-----
- f) Tuberculosis is an infectious disease. T/F
- g) Gonorrhoea is an endocrine disease. T/F
- h) Syphilis is a hypertension disease. T/F
- i) COPD is a nervous system disease. T/F
- j) Antihypertensive drug name-----

Section B: Attempt any 5 out of 6 each carry 3 marks

[5X3=15marks]

- 1) Write the pathogenesis of gonorrhoea.
- 2) Write the pathogenesis of HIV
- 3) Write the pathogenesis of pneumonia
- 4) Write the pathogenesis of malaria.
- 5) Write the Pharmacological management of AIDS
- 6) Write the pharmacology management of diabetes.

Section C: Attempt any 3 out of 4 each carry 05 marks

[3X5=15marks]

- a) Write the etiopathogenesis of AIDS
- b) What do you mean by Infectious disease? And write name also?
- c) Write the etiopathogenesis of peptic Ulcer.
- d) Write the etiopathogenesis of alcoholic liver disease.

MOTHERHOOD UNIVERSITY, ROORKEE
III Mid-Term Theory Examination (2024-25)
Diploma in Pharmacy (II year)

Subject Name: Pharmacotherapeutic

Subject Code: ER 20-24 T

Duration: 90 Min

Roll No: _____

Max. Marks: 40

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

Section-A

I. Attempt all the questions: [1×10=10 marks]

- a) name of a drug used for angina pactoris
- b) Angina pactoris is a lung disease. T/F
- c) Write two drug names of which are used for treatment for hyperlipidemia
- d) Write the drug name of which are used for treatment of COPD.....
- e) Write a Drug name of which are used for treatment of thyroid.....
- f) Tuberculosis is an infectious disease. T/F
- g) Gonorrhoea is an endocrine disease. T/F
- h) Syphilis is a hypertension disease. T/F
- i) COPD is a nervous system disease. T/F
- j) Antihypertensive drug name-----

Section B: Attempt any 5 out of 6 each carry 3 marks [3X5=15marks]

- A. Write the pathogenesis of pneumonia
- B. Write the etio pathogenesis of hypertension?
- C. Write the pharmacological management of hyperlipidemia
- D. Write the pathogenesis of malaria.
- E. Write the Pharmacological management of AIDS
- F. Write the pharmacology management of diabetes.

Section C: Attempt any 3 out of 4 each carry 05 marks [5X3=15marks]

- a) Write the etiopathogenesis of AIDS
- b) What do you mean by Infectious disease? And write name also
- c) Write the etiopathogenesis of peptic Ulcer.
- d) Write the etiopathogenesis of alcoholic liver disease.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM. II
Batch A

Subject Code: ER20-25P

Subject Name: Hospital and clinical pharmacy

Roll No. _____

Duration: 3 Hrs.

Maximum Marks: 80

1.Synopsis 10

- A. FEFO full form.
- B. Define Hospital .
- C. Define Pharmacy.
- D. What is Patient counseling.
- E. What is the full form of G.P.P.
- F. I.L.R stand for_____.
- G. Schedule- H₁. Antibiotics Examples.
- H. NDPS Drugs Examples.
- I. Define NAQS.
- J. Define Hospital Pharmacy.

2. Experiment 50

(Major Practical)

Aim: Interpretation of Laboratory report to optimize the drugs therapy in a given clinical case. (30)

(Minor Practical)

Aim: Different types of bandages such as sterile gauze, cotton, crepe bandages etc. (20)

3.Viva - Voce 10

4. Practical Record 10

MOTHERHOOD UNIVERSITY, ROORKEE
II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
D. PHARM.: II Year
Batch B

Subject Code: ER20-25P

Subject Name: Hospital and clinical pharmacy

Roll No. _____

Duration: 3 Hrs.

Maximum Marks: 80

1.Synopsis 10

- A. What is the full form of G.P.P.
- B. FEFO full form.
- C. Define Hospital .
- D. Define Pharmacy.
- E. What is Patient counseling I.L.R stand for _____.
- F. Schedule- H₁. Antibiotics Examples.
- G. NDPS Drugs Examples.
- H. Define NAQS.
- I. Define Hospital Pharmacy.

2. Experiment 50

(Major Practical)

Aim: Interpretation of Laboratory report to optimize the drugs therapy in a given clinical case. (30)

(Minor Practical)

Aim: Different types of bandages such as sterile gauze, cotton, crepe bandages etc. (20)

3.Viva-Voce 10

4. Practical Record 10

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I Mid-Term Examination (2024–25)

Diploma in Pharmacy

Subject: Hospital and clinical pharmacy (ER 20-25) T

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

SECTION-A

I. Answer all the questions: (T/F and Blanks) [10×01=10]

10marks

- | | |
|--|-----|
| 1. Schedule H1 drugs includes sensitive Antibiotics. | T/F |
| 2. Inventory control is not concerned with medicine. | T/F |
| 3. ICC means Infection control committee. | T/F |
| 4. NDPS means narcotic and psychotropic substances. | T/F |
| 5. Hospital word has been derived from Latin word HOSPES. | T/F |
| 6. Expiry drug disposal and removal is not concerned with FEFO and FIFO. | T/F |
| 7. Heart of the patient counseling session is counseling content. | T/F |
| 8. ILR (Ice line refrigerator) is not maintained temperature from 2° to 8° C. | T/F |
| 9. The pharmacy and therapeutics committee is a multi-dispensary committee including physician, pharmacist and Nurses. | T/F |
| 10. DIS is not Stand for drug information services. | T/F |

SECTION B: Attempt any 5 out of 6 each carry 3 marks

[05×03=15] marks

1. Define Hospital and hospital pharmacy.
2. Define Hospital formulary.
3. Define inventory control.
4. Define NDPS drug.
5. Give the two benefits of FEFO and FIFO
6. Write about NABH and FIP.

Section C: Attempt any 3 out of 4 each carry 05 marks

[03×05=15] marks

1. Describe the devices used for cold storage.
2. What are the requirements of Good pharmacy practice
3. Write a note on expiry drug disposal and removal
4. Write a note on pharmacy and therapeutics committee .

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II Mid-Term Theory Examination (2024-25)
Diploma in Pharmacy (II year)

Subject Name: Hospital & clinical Pharmacy

Duration: 90 Min

Subject Code: ER20-25T

Max. Marks: 40

Roll No: _____

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

Section-A: Attempt all the questions:

[10×1=10 marks]

- a) What is KFT?
- b) What is LFT?
- c) What is CBC?
- d) What is TFT?
- e) What is the pulmonary test?
- f) Test associated with cardiac disorder.
- g) Hematology is the study of ____.
- h) Thyroid is a small gland located at ____.
- i) GPP stands for?
- j) NABH stands for?

Section B: Attempt any 5 out of 6 each carry 3 marks

[5X3=15marks]

- a) Define hospital and hospital pharmacy.
- b) Define clinical pharmacy.
- c) Define schedule H1 drugs with examples.
- d) Define NDPS drugs with example
- e) Define FEFO and FIFO.
- f) Define GPP role in pharmacy.

Section C: Attempt any 3 out of 4 each carry 05 marks

[3X5=15marks]

- a) What do you mean by clinical laboratory test?
- b) Write about inventory control in the pharmacy.
- c) Write about the role of clinical pharmacists in the healthcare sector.
- d) Write about the daily activities of clinical pharmacists like ADR and patient counseling

MOTHERHOOD UNIVERSITY, ROORKEE
III Mid-Term Theory Examination (2024-25)
Diploma in Pharmacy (II year)

Subject Name: Hospital & Clinical Pharmacy

Subject Code: ER20-25T

Duration: 90 Min

Roll No: _____

Max. Marks: 40

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

Section-A

I. Attempt all the questions:

[1×10=10 marks]

- a) DIS does not stand for drug information services. T/F
- b) Expiry drug disposal and removal is not concerned with FEFO and FIFO. T/F
- c) The Heart of the patient counseling session is counseling content. T/F
- d) ILR (Ice line refrigerator) is not maintained temperature from 2° to 8° C. T/F
- e) The pharmacy and therapeutics committee are a multi-dispensary committee including physicians, pharmacists, and Nurses. T/F
- f) Test associated with cardiac disorder.
- g) Hematology is the study of ____.
- h) The thyroid is a small gland located at ____.
- i) GPP stands for?
- j) NABH stands for?

Section B: Attempt any 5 out of 6 each carry 3 marks

[3X5=15marks]

- a) Define inventory control.
- b) Define hospital and hospital pharmacy.
- c) Define clinical pharmacy.
- d) Define schedule H1 drugs with examples.
- e) Define FEFO and FIFO.
- f) Define GPP role in pharmacy.

Section C: Attempt any 3 out of 4 each carry 05 marks

[5X3=15marks]

- a) What do you mean by clinical laboratory test?
- b) Write about the role of clinical pharmacists in the healthcare sector.
- c) What are the requirements of Good pharmacy practice
- d) Write about the daily activities of clinical pharmacists, like ADR and patient counseling

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
I Mid-Term Examination (2024–25)
Diploma in Pharmacy(2nd year)
Subject: Pharmacy Law and Ethics (ER20-26T)

Duration: 90 Min

Max. Marks: 40

Name of Student: _____

Hall Ticket No: _____

Note:

- 1. The question paper is divided into three sections A, B, & C.**
- 2. Do not write anything on the question paper.**
- 3. Students must attempt all the questions in serial order.**

Section A: Answer all the questions: (whether the given statement is true or false)

[1×10=10 marks]

- a) If the drug is not labelled in prescribed manner then it is known as misbranded drug.
- b) Establishments licensed for sale of drugs shall be inspected at least not less than once in a year.
- c) Minimum area of the shop to obtain a wholesale licence to sell and stock drugs shall be not more than 15 square meters.
- d) The name of a Registered Pharmacist can be removed from the register, if he was convicted of any offence.
- e) Pharmacy Council of India (PCI) was established in 1948 and current president of
a. PCI is Mr. Montu M Patel.
- f) Minimum standard of education required for qualifying as a pharmacist is mentioned in Drugs and cosmetic act 1940.
- g) The recommendations of Drugs Enquiry Committee and Health Survey and Development Committee were responsible for laying the foundation for the *Pharmacy Act*, 1948.
- h) The Drugs and Cosmetics Act, 1920 is an act of the Parliament of India which regulates the import, manufacture and distribution of drugs in India.
- i) Schedule C and C1 Contain various biological and special products such as vaccines, sera, toxins etc.
- j) Schedule P: Contains regulations regarding poisons and their storage.

Section B: Attempt any 5 out of 6 each carry 3 marks [3X5=15marks]

- a) Write about Drug Enquire committee.
- b) Write the constitution of PCI.
- c) Mention the class of drugs & cosmetics which should not be sold, manufactured and imported.
- d) Define loan licence and repacking license according to D & C act 1940.
- e) Write about Schedule N of D & C act 1940.
- f) Mention the duties of Drug inspector and Government analyst.

Section C: Attempt any 3 out of 4 each carry 05 marks [3X5=15marks]

- a) What is wholesale and restricted license? Discuss records to be kept in a pharmacy.
- b) Discuss about Registration of Pharmacists.
- c) Write about the composition and functions of Drug Technical Advisory Board (DTAB).
- d) Write the general principles of law and various acts related to drugs and pharmacy profession

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
II Mid-Term Examination (2024–25)
Diploma in Pharmacy (2nd year)
Subject:

Subject Code: ER20-26T

Subject Name: Pharmacy Law and Ethics

Roll No: _____

Note:

Duration: 90 Min

Max. Marks: 40

1. The question paper is divided into three sections A, B, & C.

2. Do not write anything on the question paper.

3. Students must attempt all the questions in serial order.

Section A: Answer all the questions:

[10×1=10 marks]

- a) The standards set by the Indian Pharmacopoeia Commission for the drugs are legally binding for all manufacturers, importers, and distributors of drugs in India. (T/F)
- b) All food products sold in India require an FSSAI license or registration and a food label must always mention the percentage of trans fats in a product. (T/F)
- c) National Pharmaceutical Pricing Authority functions under the Ministry of Chemicals & Fertilizers. (T/F)
- d) The MTP Act allows abortion if the fetus has a good chance of mental or physical abnormalities. (T/F)
- e) The CDSCO regulates drugs and cosmetics to ensure the safety, rights, and well-being of the patients. (T/F)
- f) Drugs that have the potential to be misused or abused are generally referred to as "controlled drugs. (T/F)
- g) It is acceptable to disclose a patient's medical information without their consent. (T/F)
- h) Killing animals by giving strychnine injection and electrocuting are considered as euthanasia according to Prevention of Cruelty to animals Act. (T/F)
- i) Essential Narcotic drug means a narcotic drug notified by central government for Medical & Scientific use.. (T/F)
- j) Charas, Ganja and hashish are obtained from cannabis plant . (T/F)

Section B: Attempt any 5 out of 6 each carry 3 marks

[5X3=15marks]

- a) Write about Prohibited and Exempted advertisements.
- b) Write about FSSAI act and Rules.
- c) Write note on National List of Essential Medicine (NLEM)
- d) Write about Medical Termination of Pregnancy act..
- e) Write a note on Role of Government Pharma Regulatory bodies.
- f) What is Retail and Ceiling price of Formulations according to DPCO act 2013?

Section C: Attempt any 3 out of 4 each carry 05 marks

[3X5=15marks]

- a) Explain about NDPS act 1985.
- b) Write in detail about Clinical Establishments act 2010..
- c) Explain about prevention of cruelty to animal act 1960.
- d) Explain about basic requirements and functions of Blood Bank.

MOTHERHOOD UNIVERSITY, ROORKEE
III MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
D. PHARMACY II YEAR

Subject Code: ER20-26T

Subject Name: Pharmacy law & Ethics

Roll No. _____

Duration: 90 Minutes

Maximum Marks: 40

Section A: Answer all the questions:

[1×10=10 marks]

- a) Prostheses means used to replace missing parts of the body or to make a part of the body work better. (T/F)
- b) Medical Devices in the class III category require the highest level of regulatory oversight, including premarket approval (PMA) and Manufacturers must provide extensive clinical trial data to demonstrate safety and efficacy. (T/F)
- c) A generic medicine is a medicine that is developed to be the same as a medicine that has already been authorised. (T/F)
- d) Medical wastes are disposed of in yellow (infectious non-plastic waste), red (infectious plastic waste), white (sharps including metal sharps), and blue (glasswares & metallic body implants) colored bins or bags, each designated for specific types of waste.(T/F)
- e) Intellectual Property Rights (IPR) are legal protections granted to creators and inventors, enabling them to control the use and distribution of their creations, inventions, or other intangible assets for a specific period, (T/F)
- f) .National Disaster Response Fund (NDRF) and the National Disaster Mitigation Fund (NDMF) are designed to provide financial assistance for response, mitigation, and preparedness activities. (T/F)
- g) ANDA means Abbreviated New Drug Application. (T/F)
- h) The Biopharmaceutics Classification System (BCS) is a system to differentiate drugs on the basis of their solubility and permeability. (T/F)
- i) The Disaster Management Act of 2005 was enacted to manage disasters in India and was passed after the 2004 tsunami. (T/F)
- j) Monitoring the medical device's performance in the market, handling complaints, and reporting adverse events is called postmarketing Surveillance. (T/F)

Section B: Attempt any 5 out of 6 each carry 3 marks [3X5=15marks]

- a) Define Bioethics. Mention the principles of bioethics.
- b) What are medical devices? Mention its categories
- c) How pharma/medical waste are disposed at pharmacies & Hospitals?
- d) Write brief note on disaster management act.
- e) What is BCS system of classification of drugs?
- f) Write a note on IPR.

Section C: Attempt any 3 out of 4 each carry 05 marks [5X3=15marks]

- a) Write about ICMR national ethica; guidelines for biomedical and health research involving human participants.
- b) Write about ANDA, NDA & New drug development.
- c) Write the differences between Branded and Generic medicines.
- d) Discuss about Good Regulatory practices in Hospital Pharmacy.

B. Pharm
AY-2024-2025

All Mid Term Question Paper

(Odd & Even Semester)

(Theory + Practical)

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I-MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY I Year/ I Semester
Section: A

Subject Code: BP101T
Subject Name: HAP-I
Roll No. _____
Year/Sem.: _____

Duration: 1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions		CO	KO	Marks
Q1	Give examples for Basic life process.	1	1	02
Q2	Define Homeostasis.	1	1	02
Q3	Define Cell, Tissue, organ & Organ System.	1	1	02
Q4	Define feedback System and their types.	1	1	02
Q5	Define cell communication.	1	1	02
Total				10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type) [01×10=10]

Questions		CO	KO	Marks
Q1	Discuss about the structure & functions of cell with neat labelled diagram.	1	2	10
Q2	Discuss about tissue with special emphasis on epithelial tissue with neat labelled diagram.	1	2	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions		CO	KO	Marks
Q1	Discuss about cell signaling with special emphasis on intracellular signaling with neat labelled diagrams.	1	2	05
Q2	Define muscle tissue. Discuss about them with neat labelled diagrams.	1	2	05
Q3	Define cell transport. Discuss about the transport across cell membrane.	1	2	05
Total				10

Learning gives creativity, creativity leads to thinking, thinking provides knowledge, knowledge makes you great.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II-MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY I Year/I Semester
Section: A

Subject Code: BP101T

Subject Name: HAP-I

Roll No. _____

Year/Sem.: _____

Duration: 1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions		CO	KO	Marks
Q1	Define Bone.	2	1	02
Q2	Enlist the Skeleton bones with division.	2	1	02
Q3	Define Blood & Lymph.	3	1	02
Q4	Discuss about the functions of Blood.	3	1	02
Q5	Define Heamoglobin.	3	1	02
Total				10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type) [01×10=10]

Questions		CO	KO	Marks
Q1	Discuss about Vertebral Column & Skull bones with neat labelled diagrams.	2	2	10
Q2	Define Coagulation. Discuss about the Coagulation pathways in detail.	3	2	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)

[2×5=10]

Questions		CO	KO	Marks
Q1	Define Anemia. Discuss about the types of anemia in detail.	3	2	05
Q2	Define Heart. Discuss about it in detail with neat labelled diagram.	3	2	05
Q3	Define blood grouping. Discuss about it in detail.	3	2	05
Total				10

"Education is the key to unlock the golden door of freedom."

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. I Year/ I Sem.
Section : A

Subject Code: BP102T

Duration:1 Hrs.

Subject Name: Pharmaceutical Analysis

Maximum Marks: 30

Roll No. _____

Sem./Year:

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 Define Pharmaceutical Analysis?	CO1	KO1	02
Q2 Define Normality? Write down the equation?	CO1	KO2	02
Q3 Define Accuracy and Precision?	CO1	KO1	02
Q4 Write a note on Significant figures?	CO1	KO2	02
Q5 Write down the principle of limit test for Sulphates ?	CO1	KO2	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Define Standards? Explain Primary and secondary standards?	CO1	KO1&KO2	10
Q2 Define limit test/ Explain about limit test Chlorides?	CO1	KO1&KO2	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Define Impurities? Write down the Sources & effects of impurities?	CO1	KO1 & KO3	05
Q2 Define Errors? Explain the types of errors?	CO1	KO1 & KO2	05
Q3 Define Pharmacopoeia? Write down history of Indian Pharmacopoeia?	CO1	KO1 & KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. I Year/I Sem.
Section : A

Subject Code: BP102T
Subject Name: Pharmaceutical Analysis
Roll No. _____
Sem./Year:

Duration: 1 Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 What is Polarography?	CO3	KO3	02
Q2 Write a note on Mohr's Method?	CO4	KO3	02
Q3 Define Potentiometry?	CO4	KO3	02
Q4 Define Gravimetry Titration?	CO3	KO2	02
Q5 Define Acidimetry Titration?	CO3	KO2	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Define Redox Titration? Explain Types? Write principle and Application?	CO4	KO3	10
Q2 Application of diazotisation titration.	CO3	KO3	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Write note on Electrochemical Cell?	CO5	KO4	05
Q2 Explain Masking & Demasking agents in Complexometric titration?	CO3	KO3	05
Q3 Explain about Ilkovic Equation?	CO5	KO4	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. 1stYear/ I Sem.
Section : A

Subject Code: BP103 T
Subject Name: PHARMACEUTICS-I
Roll No. _____

Duration: 1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 Define Tablet.	CO1	KO1	02
Q2 Define Capsule.	CO1	KO1	02
Q3 Define Dentifrices.	CO1	KO1	02
Q4 Define Syrup.	CO1	KO1	02
Q5 Define Emulsion.	CO1	KO1	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Define Posology. Write a brief note on factors affecting Posology.	CO1	KO3	10
Q2 What do you mean by Prescription? Explain the parts of prescription with the help of Model Prescription.	CO1	KO3	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Write a brief note on Different Pharmacopoeias.	CO1	KO2	05
Q2 Write a brief note on Careers in Pharmacy.	CO1	KO2	05
Q3 Write the following formulas for child dose calculation: a) Young's Formula b) Clark's Formula c) Dilling's Formula	CO1	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. 1stYear/ I Sem.
Section : A

Subject Code: BP103 T
Subject Name: PHARMACEUTICS-I
Roll No. _____

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 a) 1 kg =.....gram b) 1 Teaspoonful =ml	CO3	KO1	02
Q2 a) 1 drop =.....ml b) 1 mg =gram	CO3	KO1	02
Q3 Define Isotonic solution.	CO3	KO1	02
Q4 Define Flavouring agents with examples.	CO4	KO1	02
Q5 Define Preservatives with examples.	CO4	KO1	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Define Suspending agents. Give properties of Ideal. Suspending agents. Also write a short note on stability problems and methods to overcome.	CO3	KO3	10
Q2 Define and give formulation, manufacturing procedure and auxiliary labeling of the following: a) Syrup b) Gargles	CO3	KO3	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Calculate the amount of 95% alcohol required to prepare 600 ml of 25% alcohol.	CO3	KO2	05
Q2 Differentiate between Flocculated and Deflocculated suspension.	CO3	KO2	05
Q3 Define Emulsion. Give its advantages and disadvantages.	CO4	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. I Year/ I Sem.
Section : A

Subject Code: BP104T
Subject Name: Pharmaceutical Inorganic Chemistry
Roll No. _____ Sem./Year: I/I

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks

[05×02=10]

Questions		CO	KO	Marks
Q1	Why dilute nitric acid is added in the limit test of chloride.?	CO1	KO1&KO2	02
Q2	Write down the principle involved in the limit test of Sulphate.	CO1	KO1&KO2	02
Q3	Write any two impurities in the pharmaceutical substances.	CO1	KO1&KO2	02
Q4	What is impurity?	CO2	KO1&KO2	02
Q5	Write the method for the purification of substances.	CO2	KO1&KO2	02
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks[01×10=10]

Questions		CO	KO	Marks
Q1	Write a short note on history of pharmacopoeia.	CO1	KO1&KO2	10
Q2	Explain the detail the limit test for arsenic, along with a neat and labelled diagram.	CO1	KO1&KO2	10
Total				10

Section C: Attempt any 2questions out of 3, each carry 5 marks [2×5=10]

Questions		CO	KO	Marks
Q1	Write a short note on sources of impurities.	CO2	KO1&KO2	05
Q2	Write down the principle and application of the limit test of heavy metals.	CO2	KO1&KO2	05
Q3	Write down the reaction and principle involved in the limit test for lead.	CO2	KO1&KO2	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID-TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. I Year/ISem.
Section:A

Subject Code: BP104T
Subject Name: Pharmaceutical Inorganic Chemistry
Roll No. _____
Sem./Year: IV/VII

Duration: 1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks

[05×02=10]

Questions	CO	KO	Marks
Q1 What is Oral Rehydration Salt (ORS)?	CO2	KO1&KO2	02
Q2 Define Pharmaceutical buffers.	CO2	KO1&KO2	02
Q3 Define limit test in the context of impurities.	CO3	KO1&KO2	02
Q4 What are the key functions of calcium ions in the body?	CO3	KO1&KO2	02
Q5 Define isotonic solution.	CO3	KO1&KO2	02
Total			10

Section B: Attempt any 1 question out of 2, each carry 10 marks [01×10=10]

Questions	CO	KO	Marks
Q1 Describe the functions of major physiological ions and their role in electrolyte replacement therapy.	CO2	KO1&KO2	10
Q2 Write a short note on history of pharmacopoeia.	CO2	KO1&KO2	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks [2×5=10]

Questions	CO	KO	Marks
Q1 Explain the methods of adjusting tonicity in pharmaceutical formulations.	CO3	KO1&KO2	05
Q2 Elaborate the different theories of acid and bases in detail with suitable examples from each category.	CO3	KO1&KO2	05
Q3 Describe the physiological consequences of using hypertonic and hypotonic solutions in medical treatments.	CO3	KO1&KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATION

SESSION: 2024-25
B. PHARM. I Year/ I Sem.
Section : A

Subject Code: BP105T
Subject Name: Communication skills
Roll No. _____ Sem./Year: I/I

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 1 marks

[05×01=10]

Questions		CO	KO	Marks
Q1	Define Communication?	CO1	KO2	01
Q2	Define Encoding?	CO1	KO1	01
Q3	Define visual & form discrimination?	CO1	KO1	01
Q4	Write another name of Informal channel?	CO1	KO1	01
Q5	Write the difference between upward & downward communication?	CO1	KO1	01
Q6	Define Body language?	CO1	KO2	01
Q7	Define Ideation?	CO1	KO1	01
Q8	Write about feedback?	CO1	KO1	01
Q9	Define Fore-background differentiation?	CO1	KO1	01
Q10	Define Visual memory?	CO1	KO1	01
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks

[01×10=10]

Questions		CO	KO	Marks
Q1	Briefly describe the different barrier to communication?	CO1	KO1	10
Q2	Explain verbal & non-verbal communication?	CO1	KO1	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks

[2×5=10]

Questions		CO	KO	Marks
Q1	What are the different Channel of communication?	CO1	KO1	05
Q2	Explain factor affecting perspective?	CO1	KO1	05
Q3	Differentiate between oral communication & written communication?	CO1	KO1	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. I Year/ I Sem.
Section : A

Subject Code: BP105T
Subject Name: Communication skills
Roll No. _____
Sem./Year: I/I

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 1 marks

[10×01=10]

Questions	CO	KO	Marks
Q1 Write a short note on brainstorming.	CO3	KO1	01
Q2 Write the advantages of face-to-face communications.	CO3	KO2	01
Q3 Write a short note formal communication.	CO3	KO1	01
Q4 Define subject line?	CO3	KO1	01
Q5 Enlist the points, how to become an active listener?	CO3	KO1	01
Q6 What are the do's of an interview?	CO3	KO2	01
Q7 Write the importance of physical communication.	CO4	KO1	01
Q8 What are the factors influence good verbal communication?	CO4	KO2	01
Q9 What are the dont's of an interview?	CO4	KO2	01
Q10 Write the disadvantages of face-to-face communications?	CO4	KO2	01
Total			10

Section B: Attempt any 1 question out of 2, each carry 10 marks

[01×10=10]

Questions	CO	KO	Marks
Q1 Explain different communication styles with diagram?	CO3	KO1	10
Q2 Explain when not to use written communication?	CO3	KO2	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks

[02×05=10]

Questions	CO	KO	Marks
Q1 Explain the 5C's of effective writing communication?	CO4	KO1	05
Q2 Explain the tone of voice along with it's types?	CO4	KO1	05
Q3 Explain the purpose of the interview?	CO4	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. Year/Sem.
Section: A

Subject Code: BP 106RBT.
Subject Name: Remedial Biology
Roll No. _____
Sem./Year: Ist

Duration: 1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions		CO	KO	Marks
Q1	What is taxon? Give a few examples.	CO1	KO1	02
Q2	Define Phylum & Class.	CO1	KO1	02
Q3	Define Order & Genus.	CO1	KO1	02
Q4	Write the full form for the following code – ICVN, ICBN.	CO1	KO1	02
Q5	Write the full form for the following code –ICZN, ICNB.	CO1	KO1	02
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions		CO	KO	Marks
Q1	Explain Five kingdoms of life.	CO1	KO2	10
Q2	What is Reproduction?	CO1	KO1	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions		CO	KO	Marks
Q1	Name the floral parts of an angiosperm. Also, mention their arrangements.	CO1	KO3	05
Q2	How is the study of plant anatomy useful to us?	CO1	KO1	05
Q3	What is stomata apparatus? Explain the structure of stomata with a labeled diagram.	CO1	KO1	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. Year/Sem.
Section: A

Subject Code: BP 106RBT.
Subject Name: Remedial Biology
Roll No. _____
Sem./Year: Ist

Duration: 1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions		CO	KO	Marks
Q1	Functions of Skin.	CO2	KO1	02
Q2	Cell its structure and functions.	CO5	KO1	02
Q3	Define Macronutrients.	CO4	KO1	02
Q4	Define Micronutrients.	CO4	KO1	02
Q5	Define Nephron	CO3	KO1	02
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions		CO	KO	Marks
Q1	Discuss Cardiovascular System.	CO2	KO2	10
Q2	Discuss Nervous System?	CO3	KO1	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions		CO	KO	Marks
Q1	Note on Plant Growth Hormones.	CO5	KO1	05
Q2	Discuss Roles of Digestive Enzymes.	CO2	KO1	05
Q3	Discuss functions of Lymph.	CO2	KO1	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS

SESSION: 2024-25

B. PHARM. Year/Sem.

Section :A

Subject Code: BP106 RMT

Subject Name: Remedial Mathematics

Roll No. _____

Sem./Year: I/I

Duration:1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 Define Partial Fraction and its types.	CO1	KO2	02
Q2 Define types of rational fraction	CO1	KO2	02
Q3 Define Polynomials with example.	CO1	KO2	02
Q4 What is logarithm?	CO1	KO2	02
Q5 What is Function? Mention types of function.	CO1	KO2	02
Total			10

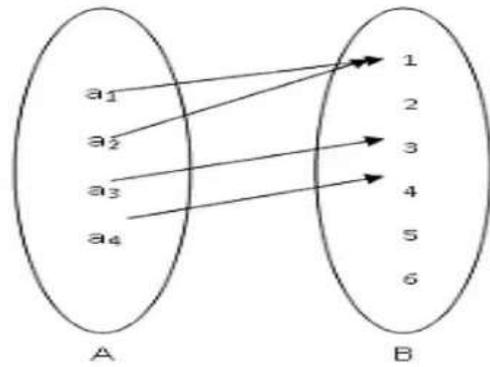
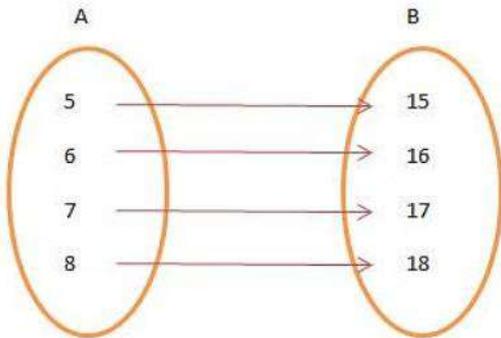
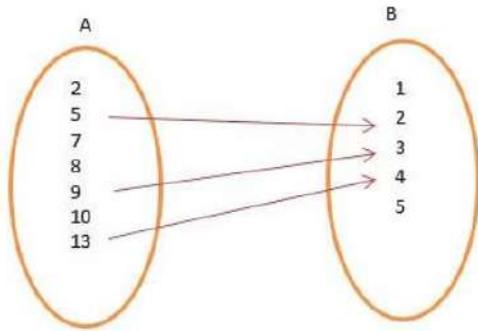
Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Convert this improper fraction into proper fraction. $\frac{f(x)}{g(x)} = \frac{x^3 + x}{x^2 - 9}$	CO1	KO2	10
Q2 What is real valued function? Classify its types with suitable example	CO1	KO1	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)

[2×5=10]

Questions	CO	KO	Marks
Q1 Write some applications of partial fractions in field of pharmacy.	CO1	KO3	05
Q2 Mention different rules of logarithm.	CO1	KO1	05
Q3 Identify and mention real and real valued function.	CO1	KO2	05



Total

10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS

SESSION: 2024-25

B. PHARM. Year/Sem.

Section: A

Subject Code: BP106 RMT

Subject Name: Remedial Mathematics

Roll No. _____

Sem./Year: I/I

Duration: 1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 Write the point of differences between matrices and determinants.	CO3	KO2	02
Q2 Find the value of the determinant $\begin{vmatrix} 4 & 6 \\ 2 & 3 \end{vmatrix}$	CO3	KO3	02
Q3 Name the methods used to solve the problems of limits.	CO3	KO2	02
Q4 Define Minors and co-factors in determinants with suitable example.	CO4	KO2	02
Q5 Find the order of the matrix. $\begin{bmatrix} 2 & 4 & 3 \\ 4 & 2 & 8 \end{bmatrix}$	CO4	KO3	02
Total			10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Write about all the properties of determinants with suitable example.	CO3	KO2	10
Q2 Solve the equation by the help of factorization method. $\lim_{x \rightarrow 3} \frac{x^2 - 5x + 6}{x - 3}$	CO3	KO3	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Define the types of matrices with suitable example.	CO4	KO3	05
Q2 Find out the result of the matrices by addition method. $A = \begin{bmatrix} 8 & 2 & 4 \\ 3 & 2 & 6 \end{bmatrix}$ $B = \begin{bmatrix} 4 & 4 & 2 \\ 6 & 8 & 2 \end{bmatrix}$	CO4	KO3	05
Q3 Find out the order of determinant and solve the equation with the help of product method. $\begin{vmatrix} 1 & 1 & 2 \\ 4 & 2 & 3 \\ 1 & 5 & 2 \end{vmatrix}$	CO4	KO3	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARMACY I Year/I Semester
SECTION A

Subject Code: BP107P

Subject Name: HAP-I

Roll No. _____

Sem./Year:

Duration: 4 Hrs.

Maximum Marks: 40

ISynopsis (MCQ or Fill ups or One word Question Answer)	10
1. Define Anatomy.	
2. Define Homeostasis.	
3. Define Physiology.	
4. Define Cell.	
5. Define Active transport.	
6. Define Facilitated diffusion.	
7. Write the full form of B.P.	
8. Define the role of cell transport.	
9. Define filtration.	
10. Write down the range of normal blood pressure.	
 II Experiment	 25
Major Practical	(15)
ODD: To study the compound microscope.	
EVEN: To record the blood pressure of a human.	
 Minor Practical	 (10)
ODD: To determine the heart rate.	
EVEN: To determine the pulse rate.	
 III Viva-Voce	 05

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ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARMACY I Year/I Semester

SECTION A

Subject Code: BP107P

Subject Name: HAP-I

Roll No. _____

Sem./Year:

Duration: 4 Hrs.

Maximum Marks: 40

ISynopsis (MCQ or Fill ups or One word Question Answer)	10
1. Define types of blood groups.	
2. Give two functions of WBC.	
3. Define the Rh factor.	
4. Define Antigen.	
5. What is a Lymph?	
6. What is the optimum pH range for blood?	
7. Give another name for Thrombocytes.	
8. Give names of two clotting factors.	
9. How many facial bones are there in a human body?	
10. Differentiate between Blood Plasma and Serum.	
 II Experiment	 25
 Major Practical	 (15)
ODD: Enumeration of White Blood Cell (WBC) Count.	
EVEN: Enumeration of Red Blood Cell (RBC) Count.	
 Minor Practical	 (10)
ODD: Determination of Bleeding Time.	
EVEN: Determination of Blood Clotting Time.	
 III Viva-Voce	 05

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FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM. I Year/ ISem.
Batch A

Subject Code: Pharmaceutical Analysis
Subject Name: BP108P
Roll No. _____
Sem./Year:

Duration: 4 Hrs.
Maximum Marks: 40

1 Synopsis (MCQ or Fill ups or One word Question Answer)	2x5=10
1) Define Standard solution?	
2) Define Titrate/Titrant?	
3) Define end Point?	
4) Write the True value & Standard value?	
5) Define Normality?	
2 Experiment	25
Major Practical	(15)
Batch A- Perform the Limit test of chloride?	
Batch B- Perform the Limit test of Iron?	
Batch C - Perform the Limit test of chloride?	
Batch D- Perform the Limit test of Iron?	
Minor Practical	(10)
Batch A-- Perform the Limit test of Arsenic	
Batch B- Perform the Limit test of Sulphates	
Batch C- Perform the Limit test of Arsenic	
Batch D- Perform the Limit test of Sulphates	
3 Viva-Voce	05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM. I Year/ ISem.
Batch A

Subject Code: Pharmaceutical Analysis
Subject Name: BP108P
Roll No. _____

Duration: 4 Hrs.
Maximum Marks: 40
Sem./Year:

- 1 Synopsis** **5x2=10**
- 1) Define Iodimetry?
 - 2) Define Iodometry?
 - 3) Define Complexometry?
 - 4) Write Potentiometry?
 - 5) Define Acidimetry and Alkalimetry?
- 2 Experiment** **25**
- Major Practical** **(15)**
- Batch A- Preparation & Standardisation of NaOH
Batch B- Preparation & Standardisation of H₂SO₄
Batch C - Preparation & Standardisation of NaOH
Batch D- Preparation & Standardisation of H₂SO₄
- Minor Practical** **(10)**
- Batch A-- Perform the Limit test of chloride?
Batch B- Perform the Limit test of Iron?
Batch C - Perform the Limit test of chloride?
Batch D- Perform the Limit test of Iron?
- 3 Viva-Voce** **05**

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM.-1st Year / I Sem
Batch A

Subject Code:BP109P

Subject Name:PHARMACEUTICS-I PRACTICAL

Roll No. _____

Duration: 4 Hrs.

Maximum Marks: 40

1.Synopsis (MCQ or Fill ups or One word Question Answer) 10

- | | |
|--|-----------------------|
| a) Tablet is an, solid dosage form. | (Unit/Bulk) |
| b) Capsule is an, solid dosage form. | (Unit/Bulk) |
| c) Emulsion isliquid dosage form. | (Monophasic/Biphasic) |
| d) Suspension isliquid dosage form. | (Monophasic/Biphasic) |
| e) Cream is dosage form. | (Liquid/ Semi-solid) |
| f) Ointment is dosage form. | (Liquid/ Semi-solid) |
| g) I.P. 7 th edition was published in | (2018/2014) |
| h) Full form of I.P. | |
| i) Full form of B.P. | |
| j) Full form of U.S.P. | |

2. Experiment 25

Major Practical (15)

Aim:- To prepare and submit 20 ml of Simple Syrup with suitable label .

Minor Practical (10)

Aim:- To prepare and submit 20 ml of Compound Syrup of Ferrous Phosphate with suitable label .

3.Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS

SESSION: 2024-25
B. PHARM.-1st Year / I Sem
(Batch A)

Subject Code:BP109P
Subject Name:PHARMACEUTICS-I PRACTICAL
Roll No. _____

Duration: 4 Hrs.
Maximum Marks: 40

1.Synopsis (MCQ or Fill ups or One word Question Answer) 10

- a) 01 Kg =gram
- b) 01 mg =.....gram.
- c) 100^o Proof sprit =%v/v alcohol. (57.1/95)
- d) Peppermint oil is used as.....agent. (Flavouring/Coloring)
- e) Lead oxide is used as.....agent. (Flavouring/Coloring)
- f) Tragacanth gum is used as.....agent. (Suspending/Coloring)
- g) Surfactants are mainly used as.....agent. (Coloring/Emulsifying)
- h) Lotion is used
- i) Liniment is used..... dosage form. (Internally/ Externally)
- j) Flocculated suspensions are stable than deflocculated suspensions.(More/Less)

2. Experiment 25

Major Practical (15)

Aim:- To prepare and submit 20 ml of Calamine Lotion with suitable label .

Minor Practical (10)

Aim:- To prepare and submit 20 ml of Iodine Throat Paint with suitable label .

3.Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID-TERM PRACTICAL EXAMINATIONS

SESSION: 2024-25

B. PHARM. I Year/ I Sem.

Batch - A

Subject Code: BP110P

Subject Name: Pharmaceutical Inorganic Chemistry

Roll No. _____

Sem./Year:

Duration: 4 Hrs.

Maximum Marks: 40

1. Synopsis (Attempt all questions, each carry 2 marks)

[05×02]=10

- A. What is Inorganic Chemistry?
- B. What is the chemical formula of silver nitrate?
- C. What is meant by a Limit Test?
- D. Define an impurity in pharmaceutical substances.
- E. What is the role of a Pharmacopoeia?

2. Experiment

25

Major Practical

(15)

- A. To study the Different apparatus used in pharmaceutical inorganic chemistry.
- B. To perform the limit test for the sulphate of given sample.

Minor Practical

(10)

- A. To perform the limit test for chloride of given sample.
- B. To perform the limit test for iron of given sample.

3.Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID-TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM. I Year/ I Sem.

Section - A

Subject Code: BP110P

Subject Name: Pharmaceutical Inorganic Chemistry

Roll No. _____

Sem./Year:

Duration: 4 Hrs.

Maximum Marks: 40

- 1. Synopsis (Attempt all questions, each carrying 2 marks) [05×02]=10**
- A. What is the chemical formula of Potash Alum.?
 - B. Write the two uses of Boric acid.
 - C. Give the chemical formula for Sodium bicarbonate.
 - D. Write the full form of ORS.
 - E. Give the Laboratory method for preparing Sodium chloride.
- 2. Experiment 25**
- Major Practical (15)**
- A. To prepare and submit Boric acid.(ODD)
 - B. To perform the identification test of Boric acid in the given sample.(EVEN)
- Minor Practical (10)**
- A. To prepare and submit Potash alum.(ODD)
 - B. To prepare and submit Ferrous Sulphate.(EVEN)
- 3.Viva-Voce 05**

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM.I Year/ I Sem.
Batch: A

Subject Code: BP111P **Duration: 4 Hrs**
Subject Name: Communication Skills Practical **Maximum Marks: 40**
Roll No. _____
Sem./Year: I/I

1. Synopsis (MCQ or Fill ups or One word Question Answer) 10

- A. Define Communication?
- B. Write down the purpose of listening?
- C. Write down the Do's for interviews?
- D. Write down the name of the types of group discussions?
- E. Write down fewpoint how to improve communication skills.

2. Experiment 25

Major Practical (15)

Sub-Batch A: To discuss about basic listening skills.

Sub-Batch B: To study and learn basic skills of communication skills in meeting with people.

Minor Practical (10)

Sub-Batch A: To discuss about purpose of group discussion.

Sub-Batch B: To discuss about the purpose of interview skills.

3. Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM.IYear/ I Sem.
Batch: A

Subject Code: BP111P

Subject Name: Communication Skills Practical

Roll No. _____

Sem./Year: I/I

Duration: 4 Hrs

Maximum Marks: 40

1. Synopsis (MCQ or Fill ups or One word Question Answer) 10

- A. Write the do's of an interview.
- B. Write the purpose of an interview.
- C. Write the dont's of an interview.
- D. Write down the names of the different communication styles.
- E. Write down the different tones of voices.

2. Experiment 25

Major Practical (15)

Sub-Batch A: To study the do's and dont's of basic communication skills.

Sub-Batch B: To discuss about communication styles.

Minor Practical (10)

Sub-Batch A: To discuss about communication styles.

Sub-Batch B: To study the do's and dont's of basic communication skills.

3. Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25

B. PHARM. I Year/ I Sem.

Batch A

Subject Code: BP112RBP

Subject Name: Remedial Biology

Roll No. _____

Sem./Year: Ist

Duration: 4 Hrs.

Maximum Marks: 40

1 Synopsis (MCQ or Fill ups or One word Question Answer) 10

1. The part of the microscope that connects the eyepiece to the nosepiece is the
a. Stage b. Body tube c. Iris diaphragm
2. The part of the microscope that controls the amount of light that passes through the specimen is the
a. Stage b. Iris diaphragm c. Base
3. The part of the microscope that moves the stage quickly up and down and is used to focus the image under low power is the
a. Coarse adjustment b. Base c. Eyepiece
4. A plant cell wall is mainly composed of
a. Protein b. Cellulose c. Lipid d. Starch
5. Lysosomes are known as “suicidal bags” because
a. Parasitic activity b. Presence of food vacuole c. Hydrolytic activity
d. Catalytic activity
6. The term cell was given by
a. Robert Hooke b. Tatum c. Schwann d. De Bary
7. Which of the following cell organelles is absent in animal cells and present in a plant cell?
a. Cell wall b. Cytoplasm c. Vacuoles d. Mitochondria
8. Which of the following statements is true about the cell wall?
a. The cell wall is mainly composed of lipid
b. The cell wall is mainly composed of starch
c. The cell wall is mainly composed of protein
d. The cell wall is mainly composed of cellulose
9. _____ is a jellylike substance found floating inside the plasma membrane.
a. Cell sap b. Cytoplasm c. Karyoplasm d. Mitochondria
10. Which of the following cell organelles is involved in the storage of food, and other nutrients, required for a cell to survive?
a. Vacuoles b. Lysosome c. Mitochondria d. Cell membrane

2 Experiment 25

Major Practical (15)

Study of Permanent Slide Preparation.

Minor Practical (10)

Study of Microscope

3 Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM. Year/Sem.
Batch A

Subject Code: BP112RBP
Subject Name: Remedial Biology
Roll No. _____

Duration: 4 Hrs.
Maximum Marks: 40
Sem./Year: I

1 Synopsis (MCQ or Fill ups or One word Question Answer)	10
i). Blood	
ii). Cell	
iii). Microscope	
iv). Tissue	
v). Root	
vi). Macromolecules	
vii). Mounting & Staining	
viii). Micromolecules	
ix). Xylum	
x). Phloem	
2 Experiment	25
Major Practical	(15)
Determination of Blood Group	
Minor Practical	(10)
Determination of Blood Pressure	
3 Viva-Voce	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. II Semester/ I Year
Section: A

Roll No.:
Subject Code: BP 201 T
Subject Name: HAP-II

Semester/Year: II/I
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short) [05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define the Nervous System.	02
CO1	K1	2	What is the Electrophysiology ?	02
CO1	K1	3	Enlist the part of Brain.	02
CO2	K1	4	Write the functions of Digestive System.	02
CO2	K1	5	Enlist the parts of Digestive System.	02

Section (B)

Note: Attempt any One question out of Two, each carry 10 marks (Long Type) [1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K1 & K2	1	Discuss on detail about Neuron with Diagram and Classify the Neuron.	10
CO1	K1 & K2	2	Give a brief explanation about Electrophysiology.	10

Section (C)

Note: Attempt any Two question out of Three, each carry 5 marks (Short Type) [2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K1 & K2	1	Give the organization of Nervous system.	05
CO2	K1 & K2	2	Define the Digestive System and draw the diagram of Digestive System with labelled.	05
CO2	K1 & K2	3	Write about the Synapses.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVENSEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. II Semester/ I Year
Section:A

Roll No.:
Subject Code: BP 201 T
Subject Name: HAP-II T

Semester/Year: II/I
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02 = 10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	Enlist the parts of Respiratory System.	02
CO3	K1	2	Write down the function of lungs.	02
CO3	K1	3	Write about the urinary system.	02
CO4	K1	4	Enlist the parts of urinary system.	02
CO4	K1	5	Define Endocrine System.	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10 = 10]

CO	KL	S. No.	Question	Marks
CO3	K1 & K2	1	Give the detailed on transport of Respiratory gases.	10
CO3	K1 & K2	2	Explain the Respiratory System and draw the diagram of respiratory system with labelled.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5 = 10]

CO	KL	S. No.	Question	Marks
CO4	K1 & K2	1	Write a short note on role of RAS in kidney.	05
CO4	K1 & K2	2	Write down the Physiology of Urine formation.	05
CO4	K1 & K2	3	Write about the Urinary system and give a note on Kidney.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM.- IIND Semester/ I Year
Section: A

Roll No.:

Subject Code: BP202T

Subject Name: Pharmaceutical Organic Chemistry-I

Semester/Year: II/I

Duration: 1Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Explain alkene and write down the general formula ?	02
CO4	K1	2	Differentiate between cyclic and Acyclic compounds.	02
CO4	K1	3	Define paraffin's and its uses.	02
CO4	K1	4	Define Aromatic compound.	02
CO4	K1	5	Define structural Isomerism.	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	Explain the Markovnikov's orientation.	10
CO1	K2	2	What is organic compound? and explain the classification of Organic compound.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO3	K3	1	Write the short note of halogenation of alkane.	05
CO1	K3	2	Explain isomerism and its classification.	05
CO2	K3	3	Write E ₁ versus E ₂ reaction and factors affecting E ₁ and E ₂ reaction.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM.: (II Semester)/(I) Year

Roll No.:

Subject Code: BP 202T

Subject Name: Pharmaceutical Organic Chemistry-I

Semester/Year: II/I

Duration: 1Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO3	K2	1	What are alcohol? Mention their importance	02
CO3	K2	2	Write the structure and uses of chlorobutanol.	02
CO4	K1	3	Define alkyl halide with example.	02
CO4	K2	4	Write down the structure of 2,2,4-trimethylpentane and 1-bromo-2,2-dimethyl propane.	02
CO4	K1	5	Define Victor Meyer's test.	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO3	K3	1	Write a note on SN ₁ and SN ₂ reactions, order of reactivity, and factors affecting of SN ₁ and SN ₂ reactions alkyl halide.	10
CO4	K2	2	Write the structure and uses of Methyl alcohol, Glycerol, Propylene glycol., Paraldehyde, Hexamine, Acetone, Chloral hydrate.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO3	K2	1	Explain the classification of alkyl halide.	05
CO3	K2	2	Write the method of preparation of alcohol.	05
CO4	K3	3	Write the structure and uses of vanillin and cinnamaldehyde.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID-TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. II Semester/Year
Section: A

Roll No.:
Subject Code: BP203-T
Subject Name: Biochemistry

Semester/Year: II/ I
Duration: 1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short) [05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	What are biomolecules? Define Macromolecules and Micromolecules.	02
CO1	K1	2	Define Carbohydrates and Enlist different types of Carbohydrates.	02
CO1	K2	3	What are Nucleotides? Enlist the components of nucleotides.	02
CO2	K2	4	What is zwitter ionic form of amino acid?	02
CO2	K1	5	Enlist 5 tests of carbohydrates.	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K3	1	Discuss in detail Glycolysis pathway and energetics of glycolysis.	10
CO1	K2	2	Discuss in brief about Protein, structure of Protein.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Difference Between Exothermic and Endothermic Reactions.	05
CO2	K2	2	Give the biological significance of ATP and Cyclic AMP.	05
CO2	K2	3	What is Nucleic acid? Describe the structure of DNA and RNA in detail.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. II Semester/Year

Roll No.:
Subject Code: BP203-T
Subject Name: Biochemistry

Semester/Year: II/ I
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions; each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define Enthalpy and Entropy.	02
CO1	K1	2	What are nucleic acid and give an example.	02
CO1	K2	3	Define Cholesterol and give an example.	02
CO2	K2	4	Briefly explain atherosclerosis.	02
CO2	K1	5	What do you understand by the term Transamination? Give example.	02

Section (B)

Note: Attempt any one question out of two ; each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K3	1	Discuss in detail the β - oxidation of fatty acids.	10
CO1	K2	2	Discuss in brief about Electron transport chain (ETC) and its mechanism	10

Section (C)

Note: Attempt any two out of three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Discuss in detail ketone bodies, its formation of ketone bodies	05
CO2	K2	2	Define cholesterol, its significance, and the conversion of cholesterol into bile acid.	05
CO2	K2	3	Discuss in detail the Citric acid cycle-Pathway, energetics, and significance.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024 - 25
B. PHARM II SEMESTER/I Year
SECTION- A

Roll No.:
Subject Code: BP204T
Subject Name: PATHOPHYSIOLOGY

Semester/Year: II/I
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks(Very Short)/MCQ/(T/F) [05×02 = 10]

CO	KL	S.No.	Question	Marks
CO1	K1	1	Define Cell Injury and Cell Adaptation.	02
CO1	K1	2	Define Necrosis and Apoptosis.	02
CO1	K1	3	What is Metaplasia. List out different types of Metaplasia.	02
CO1	K1	4	Write about the signs/symptoms and types of Inflammation.	02
CO2	K1	5	Define Hypertension. Give various stages of Hypertension.	02

Section (B)

Note: Attempt any One questions out of Three, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S.No.	Question	Marks
CO1	K3	1	What is Cellular Adaptations and Explain all the types of cellular adaptations in detail.	10
CO1	K3	2	Define Inflammation. Write in detail about the two mechanisms of Inflammation.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S.No.	Question	Marks
CO1	K2	1	Elaborate the common properties of mediators of Inflammation and give examples.	05
CO1	K2	2	Write about I. Cellular swelling II. Acidosis & Alkalosis	05
CO2	K2	3	Discuss the etiology/causes, pathogenesis, symptoms & treatment of Hypertension	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024 - 25
B. PHARM II SEMESTER/I Year
SEC A

Roll No.:
Subject Code: BP204T
Subject Name: PATHOPHYSIOLOGY

Semester/Year: II/I
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks(Very Short)/MCQ/(T/F) [05×02 = 10]

CO	KL	S.No.	Question	Marks
CO2	K1	1	What are different types of Angina.	02
CO2	K1	2	Write the pharmacological & non pharmacological treatment of Atherosclerosis.	02
CO2	K1	3	Define Emphysema.	02
CO2	K1	4	Write about different types of Myocardial Infarction.	02
CO2	K1	5	Write the causes of Acute Renal Failure.	02

Section (B)

Note: Attempt any One questions out of Three, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S.No.	Question	Marks
CO2	K3	1	Explain in detail Types of Asthma, Pathogenesis of Asthma symptoms and treatment of Asthma.	10
CO3	K3	2	Discuss in detail about Types of Diabetes Mellitus (DM), Pathogenesis & Treatment of Type 1 & Type 2 DM.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S.No.	Question	Marks
CO2	K2	1	What is Congestive Heart Failure and its types? Give the pathogenesis along with factors responsible for Congestive Heart Failure.	05
CO3	K2	2	Write the differences between Gastric ulcer and duodenal ulcer and give the pathogenesis of peptic ulcer.	05
CO3	K2	3	What are different types of Anaemia? Explain in detail about a) Sickle cell Anaemia b) Thalassemia	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. (II Semester)/(I Year)
Section: A

Roll No.:
Subject Code: BP205T
Subject Name: Computer Applications in Pharmacy

Semester/Year:II/I
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Write full form of HTML, www and XML.	02
CO1	K1	2	List of two input and output devices of computer system.	02
CO1	K1	3	Write down the full form of RAM, ROM & CPU.	02
CO2	K1	4	Convert $(171)_{10} \rightarrow (?)_2$	02
CO2	K1	5	Convert $(1011)_2 \rightarrow (?)_{10}$	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define Information Gathering. Give Objective and process of Information Gathering.	10
CO1	K2	2	Define Data Flow Diagram with types and components in details.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Convert $(100111)_2 \rightarrow (?)_{10} \rightarrow (?)_8 \rightarrow (?)_{16}$	05
CO2	K1	2	Multiply $(1111)_2 \times (1101)_2$	05
CO2	K1	3	Discuss process life cycle.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. (II Semester)/(IYear)
Section: A

Roll No.:

Subject Code: BP205 T

Subject Name: Computer Application in Pharmacy

Semester/Year:II/I

Duration:1Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	Define the term electronic prescribing.	02
CO2	K1	2	Give full form of CSS and MYSQL.	02
CO2	K2	3	Define the term XML and HTML.	02
CO1	K1	4	Convert $(1110110)_2$ to $(?)_{10}$.	02
CO1	K1	5	Multiply $(111)_2 \times (101)_2$.	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO3	K2	1	Explain the applications of computer in pharmacokinetics and drug design in details.	10
CO3	K1	2	Discuss about the applications of computer in diagnostic and patient monitoring system.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO4	K1	1	Write short note on bioinformatics	05
CO3	K1	2	Write impact of bioinformatics in vaccine discovery.	05
CO2	K1	3	Write a note on drug information storage & retrieval.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM.- 2nd Semester/I Year
Section: A

Roll No.:
Subject Code: BP206T
Subject Name: Environmental Sciences

Semester/Year:II/I
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short) [05×02 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	What is environmental studies?	02
CO1	K2	2	Write a short note on producers and consumers.	02
CO1	K1	3	What is deforestation?	02
CO2	K1	4	Explain about water resources.	02
CO2	K2	5	What is sample food chain?	02

Section (B)

Note: Attempt any One questions out of Three, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define ecosystem and write its components.	10
CO1	K2	2	Give a exhaustive note on Multidisciplinary nature of environmental studies.	10
CO1	K2	3	What is natural resources? and its associated problems.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	Write difference between renewable and non renewable resources.	05
CO2	K1	2	What is terrestrial ecosystem and its types?	05
CO2	K1	3	Write a note on role of individual in conservation of natural resources.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM.- 2nd Semester/I Year
Section: A

Roll No.:
Subject Code: BP206T
Subject Name: Environmental Sciences

Semester/Year: II/I
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short) [05×02 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	What is soil pollution?	02
CO1	K2	2	Write a short note on Antarctic ozone depletion.	02
CO1	K1	3	What is industrial water pollution?	02
CO2	K1	4	Explain about Acid rain.	02
CO2	K2	5	What is PH parameter of water pollution?	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	What is pollution and write in detail its types.	10
CO1	K2	2	Give an exhaustive note on soil pollution..	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	Explain about Minamata disease.	05
CO2	K1	2	What is the role of individual in pollution prevention?	05
CO2	K1	3	Write a note on prevention and control of Air Pollution.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATION
SESSION: 2024-25

B. PHARMACY: II Semester/ I Year
SECTION-A

Subject Code: BP207 P

Subject Name: Human Anatomy and Physiology-II P

Roll No. _____

Sem. /Year: II/ I

Duration: 4 Hrs.

Maximum Marks: 40

I Synopsis (One word &very short answer)

[10×01=10marks]

1. Write down the full form of CNS.
2. Enlist the parts of neuron.
3. Write down the full form of CSF.
4. Write down the full form of PNS.
5. Enlist the parts of Alimentary canal.
6. Enlist the parts of Brain.
7. Define neuron.
8. Write about the synapses.
9. Write down the full form of ANS.
10. Enlist the parts of accessory organs.

II Experiments:

25

Major Practical

(15)

ODD: To demonstrate positive and negative feedback mechanism.

EVEN: To examine the different types of taste.

Minor Practical

(10)

ODD: To demonstrate the function of Olfactory Nerve.

EVEN: To record Basal Mass Index (BMI).

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM PRACTICAL EXAMINATION
SESSION: 2024-25
B. PHARMACY: II Semester/ I Year
SECTION-A

Subject Code:BP207P
Subject Name:Human Anatomy and Physiology-II
Roll No. _____

Duration: 4 Hrs.
Maximum Marks: 40

I Synopsis (very short answer)

[10×02=10marks]

1. Define Urinary System.
2. Enlist the parts of nephron.
3. Define Endocrine System.
4. Define Respiratory System.
5. Enlist the glands of Endocrine System.

II Experiments:

25

Major Practical

(15)

ODD:To demonstrate the general neurological activity.

EVEN:To determine tidal volume and vital capacity.

Minor Practical

(10)

ODD:To demonstrate the visual activity.

EVEN:To demonstrate recording of body temperature.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARMACY: II Semester/ I year
SECTION-A

Subject Code: BP208P

Subject Name: Pharmaceutical Organic Chemistry-I

Roll No. _____

Sem./Year: II/I

Duration: 4 Hrs.

Maximum Marks: 40

I Synopsis (One word Question Answer)

[10×01 = 10marks]

1. Define recrystallization.
2. What are uses of acetanilide. Write reaction for synthesis of acetanilide.
3. What do you mean by theoretical yield and percentage yield?
4. Give example of novel brominating agent used of synthesis of p-bromo acetanilide.
5. What is melting point?
6. Define Boiling point.
7. Give the structure of iodoform and m-dinitrobenzene.
8. Name the group which is common in aldehydes and ketones?
9. Write the steps involved in crystallization.
10. What are advantages of using green method?

II Experiments:

25

Major Practical

(15)

ODD: To study the synthesis para-Bromoacetanilide from acetanilide

EVEN: To record the preparation of meta-Dinitrobenzene.

Minor Practical

(10)

ODD: To determine the melting point.

EVEN: To determine the boiling point.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARMACY: II Semester/I year
SECTION-A

Subject Code: BP208P
Subject Name: Pharmaceutical Organic Chemistry-I
Roll No. _____

Duration: 4 Hrs.
Maximum Marks: 40
Sem./Year: II/I

I. Synopsis (MCQ or Fill ups or One word Question Answer)

[10×01 = 10marks]

1. What are uses of aniline?
2. Define bromination.
3. Define nitration.
4. Write the uses of 5-nitro salicylic acid
5. Define hydrolysis.
6. What is Diazonium salt?
7. Define Perkin reaction.
8. What are the uses of cinnamic acid?
9. Define oxidation.
10. Role of NAOH and HCL.

II Experiments:

25

Major Practical

(15)

ODD: To study the 2,4,6 tri-bromoaniline from aniline.

EVEN: To record the identification of analysis of organic compound.

Minor Practical

(10)

ODD: To determine the iodofrom from ethyl alcohol.

EVEN: To determine the pure sample of N-butyl acetate.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATION
SESSION: 2024-25

B. PHARMACY II Semester /I year
SECTION -A

Subject Code: BP209P

Subject Name: Biochemistry

Roll No. _____

Sem./Year: II/I

Duration: 4 Hrs.

Maximum Marks: 40

I Synopsis (Fill ups and One word Question Answer)

[10×01 = 10marks]

1. Which macromolecule does not dissolve in water.....
2. What is the building block of Protein
3. Glucose and Fructose are examples of
4. What is the building block of Nucleic acid?
5. What are the components of Nucleotids?
6. What are the monomers of lipids?
7. Name the enzyme responsible for the conversion of glucose to glucose-6-phosphate.
8. Molecular formula of Glucose.
9. Name the test for carbohydrates.
10. The enzyme..... breaks starch down to maltose.

II Experiments:

25

Major Practical

(15)

ODD: To perform the Qualitative test for carbohydrates.

EVEN: To perform the Qualitative test for Protein.

Minor Practical

(10)

ODD: To determine the serum total cholesterol.

EVEN: To perform the Qualitative test for Carbohydrates.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25

B. PHARMACY II Semester/ I year
SECTION-A

Subject Code:BP209 P

Subject Name:Biochemistry

Roll No. _____

Sem./Year: II/I

Duration: 4 Hrs.

Maximum Marks: 40

ISynopsis (Fill ups and One word Question Answer)

[10×01 = 10marks]

1. End product of glycolysis is
2. The most abundant monosaccharides in nature is
3. The synthesis of glucose from fat is called.....
4. Type III glycogen storage disease is known as.....
5. Bile acid is synthesized in.....
6. Two monosaccharide's are joined by.....
7.is the major site for purine nucleotide synthesis.
8. Name various components of nucleotide.
9. Name the test for Protein.
10. How many ATP are produced in kreb's cycle.

II Experiments:

25

Major Practical

(15)

ODD:To perform the Qualitative testfor Protein.

EVEN:To perform the Qualitative test for Lipid .

Minor Practical

(10)

ODD:Toperform the Qualitative test for Lipid .

EVEN:To perform the identification test for albumin.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
IMID TERM PRACTICAL EXAMINATIONS 2024-25

B. Pharm.-(II)Sem/(I)year

Section-A

Subject Code: BP210P

Subject: Computer Application in Pharmacy

Roll No.

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Time: 2 Hours

Maximum Marks: 20

Sem: II

Note: Attempt all Questions.

I. Synopsis **(5X01=05Marks)**

- a) Give full form of CPU.
- b) $(132)_{10} \rightarrow (?)_2$
- c) Give full form of computer.
- d) $(1B)_{16} \rightarrow (?)_{10}$
- e) Give full form of XML.

II. Experiments: **(10)**

(a) Major Practical: **(1X06=06Marks)**

Aim- To design a questionnaire using a word processing package to gather information about particular disease.

(b) Minor Practical: **(1X04=04Marks)**

Aim- To Create a HTML web page to show personal information.

III. Viva- voce (5)

MOTHERHOOD UNIVERSITY, ROORKEE
II MID TERM PRACTICAL EXAMINATIONS 2024-25
B. Pharm.-(II)Sem/(I)year

Section-A

Subject Code: BP210P

Subject: Computer Application in Pharmacy

Roll No.

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Time: 2 Hours

Maximum Marks: 20

Sem: II

Note: Attempt all Questions.

- I. Synopsis** **(5X01=05Marks)**
- a) Define Bioinformatics.
 - b) $(19)_{10} \rightarrow (?)_2$
 - c) Give full form of LIMS.
 - d) Define Pharmacokinetics.
 - e) Give full form TIMS.

II. Experiments: **(10)**

(a) Major Practical: **(1X06=06Marks)**

Aim- Generating report and printing the report from patient database.

(b) Minor Practical: **(1X04=04Marks)**

Aim-Creating mailing labels Using Label Wizard , generating label in MS WORD.

III. Viva- voce **(5)**

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. II / III
Section: A

Subject Code: BP301T

Subject Name: POC-II

Roll No. _____

Sem./Year: III / II

Duration: 1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks[05×02=10]

Questions		CO	KO	Marks
Q1	Why phenol are more acidic than alcohols	CO1	KO1	02
Q2	Give Huckel's rule in benzene	CO1	KO1	02
Q3	Write the Structure and uses of DDT, Saccharin	CO1	KO1	02
Q4	Write the Structure and uses of phenol, cresols	CO1	KO1	02
Q5	Illustrate the Phthalein dye test for Phenol	CO2	KO2	02
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks [01×10=10]

Questions		CO	KO	Marks
Q1	Give synthetic and other evidences in the derivation of structure of benzene	CO1	KO1	10
Q2	Write the qualitative tests of Phenols	CO2	KO2	10
Total				10

Section C: Attempt any 2questionsout of 3, each carry 5 marks[02×05=10]

Questions		CO	KO	Marks
Q1	Discuss in detail Acidity of phenols	CO1	KO2	05
Q2	Write the Chemical Reactions of benzene	CO1	KO1	05
Q3	Write the effect of substituents on acidity	CO2	KO1	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MIDTERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. Year II/ III Sem.
Section:A

Subject Code: BP301T

Subject Name: Pharmaceutical Organic Chemistry - II

Roll No. _____

Sem./Year:

Duration:1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions		CO	KO	Marks
Q1	Structure of phenol and benzoic acid.	CO2	KO2	02
Q2	Uses of naphthol and cresol	CO2	KO1&KO2	02
Q3	Write the biological importance of lipids.	CO3	KO1&KO2	02
Q4	Define Triglyceride and its structure	CO3	KO1&KO2	02
Q5	Define drying of oils and its uses	CO3	KO1&KO2	02
Total				10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions		CO	KO	Marks
Q1	Define fatty acid reactions such as hydrolysis, hydrogenation, and rancidity of oils with their chemical reactions.	CO2	KO1 & KO2	10
Q2	Write the qualitative tests of phenol.	CO2	KO2	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)

[2×5=10]

Questions		CO	KO	Marks
Q1	Give the five differences between fats and oils with examples.	CO3	KO1 & KO2	05
Q2	What are acid value, ester value, and iodine value, with their principles and significance?	CO3	KO1 & KO2	05
Q3	Write the chemical reactions of benzene	CO3	KO1	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. IYear/III Sem.
Section : A

Subject Code: BP302T
Subject Name: Physical pharmaceutics-I
Roll No. _____ Sem./Year: III/II

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 1 marks

[05×01=10]

Questions		CO	KO	Marks
Q1	Define Solubility?	CO1	KO1	01
Q2	What are Aerosols?	CO2	KO1	01
Q3	Define Saturated solution?	CO1	KO1	01
Q4	Write the full form of PPM & CST?	CO1	KO1	01
Q5	Define Surfactants with an example?	CO1	KO1	01
Q6	Define Sublimation with an example?	CO2	KO1	01
Q7	Define CST?	CO1	KO1	01
Q8	Write the formula of mole fraction?	CO1	KO2	01
Q9	Define Relative humidity?	CO2	KO1	01
Q10	Explain Latent heat?	CO2	KO1	01
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions		CO	KO	Marks
Q1	Briefly describe Raoult's law & it's deviation?	CO1	KO2	10
Q2	Explain Inter molecular forces in liquids?	CO2	KO2	10
Total				10

Section C: Attempt any 2questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions		CO	KO	Marks
Q1	What are the factors affecting the solubility of solids in liquids?	CO1	KO1	05
Q2	Explain Vapour pressure?	CO2	KO1	05
Q3	Explain Gas law & Ideal gas equation?	CO2	KO2	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. IYear/III Sem.
Section :A

Subject Code: BP302T
Subject Name: Physical pharmaceutics-I
Roll No. _____
Sem./Year: III/II

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 1 marks

[10×01=10]

Questions		CO	KO	Marks
Q1	Define refractive index?	CO3	KO2	01
Q2	Write a short note on detergency?	CO3	KO2	01
Q3	Define capillators?	CO3	KO1	01
Q4	Write the full form of HLB?	CO3	KO1	01
Q5	Define optical rotation?	CO3	KO1	01
Q6	Define cohesive force and adhesive force?	CO3	KO1	01
Q7	Define polymorphism?	CO4	KO1	01
Q8	Define tonicity?	CO4	KO1	01
Q9	Define buffers?	CO4	KO1	01
Q10	What is contact angle?	CO4	KO1	01
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions		CO	KO	Marks
Q1	Explain any two methods to measure the surface and interfacial tension?	CO3	KO3	10
Q2	Explain any one method to determine the pH of the solution?	CO3	KO3	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)

[02×05=10]

Questions		CO	KO	Marks
Q1	Explain liquid crystals and it's types?	CO4	KO1	05
Q2	Explain surface active agents along with it's classification?	CO4	KO1	05
Q3	Difference between physical adsorption and chemical adsorption?	CO4	KO1	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY IIYear/IIISemester
Section: A

Subject Code: BP303T

Subject Name: PHARMACEUTICAL MICROBIOLOGY

Duration: 1Hrs.

Maximum Marks: 30

Roll No. _____

Year/Sem.: _____

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions		CO	KO	Marks
Q1	Define bacteria with examples with neat labelled diagram.	1	1	02
Q2	Discuss about the morphological classification of bacteria.	1	1	02
Q3	Classify bacteria based on temperature.	1	1	02
Q4	Classify bacteria based on nutrition availability.	1	1	02
Q5	Classify bacteria based on oxygen availability.	1	1	02
Total				10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type) [01×10=10]

Questions		CO	KO	Marks
Q1	Define microscopy. Discuss about the different types of microscopes.	1	2	10
Q2	Define bacterial culture media. Discuss about the nutritional requirements & raw materials used for culture media.	1	2	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)

[2×5=10]

Questions		CO	KO	Marks
Q1	Difference between prokaryotes & eukaryotes.	1	2	05
Q2	Difference between aerobes & anaerobes.	1	2	05
Q3	Discuss about the bacterial growth curve.	1	2	05
Total				10

Learning gives creativity, creativity leads to thinking, thinking provides knowledge, knowledge makes you great.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II-MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY IIYear/IIISemester
Section: A

Subject Code: BP303T

Subject Name: PHARMACEUTICAL MICROBIOLOGY

Roll No. _____

Year/Sem.: _____

Duration: 1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions		CO	KO	Marks
Q1	Define Fungi with examples with neat labelled diagram.	3	1	02
Q2	Discuss about the classification of virus.	3	1	02
Q3	Classify antiseptic.	3	1	02
Q4	Define Aseptic area.	4	1	02
Q5	Define Disinfection.	3	1	02
Total				10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type) [01×10=10]

Questions		CO	KO	Marks
Q1	Define Physical Sterilization. Discuss about the different types of equipment used in it in detail.	2	2	10
Q2	Define Microbiological assay. Discuss about the methods of standardization of antibiotics.	4	2	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)

[2×5=10]

Questions		CO	KO	Marks
Q1	Discuss about evaluation of sterilization methods.	2	2	05
Q2	Discuss about the different sources of contamination in an aseptic area.	4	2	05
Q3	Discuss about the classification of clean area in detail.	4	2	05
Total				10

"Education is the key to unlock the golden door of freedom."

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MIDTERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. IIYear/ III Sem.
Section : A

Subject Code: BP304T
Subject Name: Pharmaceutical Engineering
Roll No. _____
Sem./Year: _____

Duration: 1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 Define Attrition and Impact.	C01	K01	02
Q2 Write principle of Hammer mill and Edge Runner Mill.	C01	K02	02
Q3 Enlist Mechanism of Size separation.	C01	K01	02
Q4 Differentiate Between Fluid Statics and Fluid Dynamics.	C01	K01	02
Q5 Enlist equipments used for size reduction.	C01	K01	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 State and Dervive Bernoulli's theorem.	C01	K02	10
Q2 Explain venturimeter, its principle, working, construction, uses, Merits and demerits with well labelled diagram.	C01	K03	10
Total			10

Section C: Attempt any 2questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Explain Manometer, types of manometer briefly with well labelled diagram.	C01	K02	05
Q2 Explain Hammer mill, its principle, working, construction, uses, merits and demerits with well labelled diagram.	C01	K01	05
Q3 Explain cyclone separator, its principle, working, construction, uses, merits and demerits with well labelled diagram.	C01	K01	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B.PHARM. IYear/IIISem.
Section:A

Subject Code: BP304T

Subject Name: Pharmaceutical Engineering

Roll No _____

Sem./Year: _____

Duration: 1Hrs.

Maximum Marks:30

SectionA: Attempt all questions, each carry 2 marks(Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 Define Evaporation with example.	CO3	KO1	02
Q2 Define Heat transfer and mechanism of heat transfer.	CO3	KO2	02
Q3 Difference between heat interchangers and heat exchanger.	CO3	KO1	02
Q4 Define distillation and enlist various distillation process.	CO4	KO1	02
Q5 State various factors influencing evaporation process.	CO4	KO1	02
Total			10

SectionB: Attempt any 1 questions out of 2, each carry 10 marks(Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Describe Principle, construction, working of multiple effect evaporator.	CO3	O2	10
Q2 Discuss Principle, construction, working, uses, advantages and disadvantages of Fractional distillation.	CO3	O3	10
Total			10

SectionC: Attempt any 2 questions out of 3, each carry 5 marks(Short Type)

[2×5=10]

Questions	CO	KO	Marks
Q1 Explain Molecular distillation in detail and types of molecular distillation.	CO4	O2	05
Q2 Discuss Horizontal tube evaporator	CO4	O1	05
Q3 Discuss Heat transfer objectives, application & heat transfer mechanism in detail..	CO4	O1	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM.II/III
Batch A

Subject Code:BP305P

Subject Name: POC-II

Duration: 4 Hrs.

Maximum Marks: 40

Roll No. _____

Sem./Year:III/II

- | | |
|---|-------------|
| 1 Synopsis (MCQ or Fill ups or One word Question Answer) | 10 |
| 2 Experiment | 25 |
| Major Practical | (15) |
| Sub-Batch A: To prepare acetanilide from aniline by acylation reaction and find out percentage yield. | |
| Sub-Batch B: To Determine Acid Value of Given Oil Sample. | |
| Sub-Batch C: To prepare acetanilide from aniline by acylation reaction and find out percentage yield. | |
| Sub-Batch D: To Determine Acid Value of Given Oil Sample. | |
| Minor Practical | (10) |
| Sub-Batch A: Experiments involving laboratory techniques : Steam distillation | |
| Sub-Batch B: Experiments involving laboratory techniques : Recrystallization | |
| Sub-Batch C: Experiments involving laboratory techniques : Steam distillation | |
| Sub-Batch D: Experiments involving laboratory techniques : Recrystallization | |
| 3 Viva-Voce | 05 |

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID-TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25

B. PHARM.II-Year/Sem-III.

Batch A

Subject Code: BP 305P

Subject Name: Pharmaceutical organic chemistry-II

Roll No. _____

Sem./Year:

Duration: 4 Hrs.

Maximum Marks: 40

1.Synopsis (Attempt all questions, each carrying 2 marks) (05×02=10)

- a. Chemical structure of glycerol and fatty acid.
- b. Biological importance of lipid.
- c. Give two examples of fats and oil
- d. Vegetable ghee is manufactured by which process.....
- e. Oil and fat are good conductors of electricity(True/False).....

2 Experiment (25)

Major Practical (15)

Sub-Batch A

To prepare the Benzil from benzoin by an oxidation reaction and find out percentage yield.

Sub-Batch B

To prepare meta-dinitrobenzene from nitrobenzene by nitration reaction and find out percentage yield.

Sub-Batch C

To prepare para-bromo acetanilide from acetanilide by halogenation reaction and find out percentage yield.

Sub-Batch D

To prepare di-benzal acetone from benzaldehyde by casein-schmidt reaction and find out percentage yield.

Minor Practical (10)

Sub-Batch A

To prepare di-benzal acetone from benzaldehyde by casein-Schmidt reaction and find out percentage yield.

Sub-Batch B

To prepare the Benzil from benzoin by an oxidation reaction and find out the percentage yield.

Sub-Batch C

To prepare meta-dinitrobenzene from nitrobenzene by nitration reaction and find out percentage yield.

Sub-Batch D

To prepare para-bromo acetanilide from acetanilide by halogenation reaction and find out percentage yield.

3 Viva-Voce (05)

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25

B. PHARM.II Year/ III Sem.

Batch: A

Subject Code: BP306P

Subject Name: Physical Pharmaceutical-I Practical

Duration: 4 Hrs

Maximum Marks: 40

Roll No. _____

Sem./Year: III/II

1. Synopsis (MCQ or Fill ups or One word Question Answer) 10

- A. Define Solubility?
- B. Define Partition coefficient?
- C. Write the chemical formula of Carbon tetra chloride.
- D. Write the name of the chemical used as an indicator in titration?
- E. Write down the HandersonHasselbalch equation?

2. Experiment 25

Major Practical (15)

Sub-Batch A: To determine the solubility of the drug at different temperatures.

Sub-Batch B: Determination of pKa value using half neutralization Handerson Hasselbalch equation.

Minor Practical (10)

Sub-Batch A: To determine the partition coefficient of Iodine in CCl₄ and water.

Sub-Batch B: To determine the partition coefficient of Succinic acid between benzene and water.

3. Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM. IIIYear/ IVSem.
Batch B

Subject Code: Physical Pharmaceutics-I
Subject Name:BP306P
Roll No. _____

Duration: 4 Hrs.
Maximum Marks: 40
Sem./Year:

1 Synopsis (MCQ or Fill ups or One word Question Answer) 2x5=10

- 1) Define Dipole moment?
- 2) Define Sorensens pH Scale?
- 3) What is a CST Method?
- 4) Define Dielectric Constant??
- 5) Define Super saturated Solution?

2 Experiment 25

Major Practical (15)

Batch A-Determination of Surface tension of given liquids by drop count method?
Batch B- Determination of Surface tension of given liquids by drop weight method?
Batch C- Determination of Surface tension of given liquids by drop count method?
Batch D- Determination of Surface tension of given liquids by drop weight method?

Minor Practical

Batch A-D – Determination of % composition of NaCl in a solution using Phenol-Water system by CST method? (10)

3 Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARMACY II Year/IIISemester
SECTION A

Subject Code: BP307P

Subject Name: PHARMACEUTICAL MICROBIOLOGY

Duration: 4 Hrs.

Maximum Marks: 40

Roll No. _____

Sem./Year:

ISynopsis (MCQ or Fill ups or One word Question Answer)

10

1. Define Bacteria.
2. Define Coccus.
3. Define Bacillus.
4. Define Mesophiles.
5. Define Psychrophiles.
6. Define Thermophiles.
7. Define Gram Staining.
8. Define Simple Staining.
9. Define Acid fast Staining.
10. Define Bacterial Growth Curve.

II Experiment

25

Major Practical

(15)

ODD:To carryout simple staining.

EVEN:To carryout gram staining process.

Minor Practical

(10)

ODD:To carryout acid-fast staining.

EVEN:To isolate pure culture of micro-organism

III Viva-Voce

05

"Education is the most powerful weapon which you can use to change the world."

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM.II Year/III Sem.
Batch-A

Subject Code:BP-307P

Subject Name: Pharmaceutical microbiology

Roll No. _____

Sem./Year:

Duration: 4 Hrs.

Maximum Marks: 40

- 1.Synopsis (MCQ or Fill ups or One word Question Answer) 10**
1. The staining technique was developed by.....in
 2. Principle of acid-fast staining.
 3. What are ionizing radiations?
 4. Principle of simple staining.
 5. Write down any 2 filter media used for sterilization.
 6. Write about uncoating/ biosynthesis in replication of virus.
 7. Write down methods for release in replication of virus.
 8. Budding is.....
 9. On the basis of morphology virus are classified into.....
 10. Virus composed of..... and
- 2. Experiment 25**
- Major Practical (15)**
- Sub-Batch A-**To determine the ability of microorganism oxidize glucose and produce acid.
- Sub-Batch B-**To determine the Capacity of micro organisms to produce acetoin from fermentation
- Sub-Batch C-** To determine the ability of microorganism oxidize glucose and produce acid.
- Sub-Batch D-** To determine the Capacity of micro organisms to produce acetoin from fermentation
- Minor Practical (10)**
- Sub-Batch A-**To Prepare Nutrients Slab & agar Slant.
- Sub-Batch B-**To Carryout Simple Staining.
- Sub-Batch C-**To Carryout Sub Culturing of bacteria & Fungus.
- Sub-Batch D-**To Carryout Sterility testing of differerent pharmaceutical products.
- 3. Viva-Voce 05**

ALL THE BEST

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25

B. PHARM. Year/Sem.II year/ III Sem
Batch A

Subject Code:BP308P
Subject Name: Pharmaceutical Engineering
Roll No. _____
Sem./Year:

Duration: 4 Hrs.
Maximum Marks: 40

1 Synopsis (MCQ or Fill ups or One word Question Answer)	10
1. Write Principle of fluid energy mill and hammer mill ?	
2. Define filtration?	
3. Enlist equipments for size reduction?	
4. Define Attrition and Impact?	
5. Define evaporation?	
2 Experiment	25
Major Practical	(15)
Sub-Batch A–To study the effect of various factors affecting rate of evaporation.	
Sub-Batch B - To study the effect of concentration of slurry on the rate of filtration	
Sub-Batch C - To study the effect of surface area on the rate of filtration.	
Sub-Batch D - To study the effect of the time on the rate of crystallization.	
Minor Practical	(10)
Sub-Batch A - To study the effect of the time on the rate of crystallization.	
Sub-Batch B - To study the effect of various factors affecting rate of evaporation	
Sub-Batch C- To study the effect of concentration of slurry on the rate of filtration	
Sub-Batch D- To study the effect of surface area on the rate of filtration.	
3 Viva-Voce	05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM. II Year/ I Sem.
Batch B

Subject Code: BP308P

Subject Name: Pharmaceutical Engineering

Duration: 4 Hrs.

Maximum Marks: 40

Roll No. _____

Sem./Year:

1 Synopsis 10

- i. Write the differences between Evaporation and other heating Processes.
- ii. Define Critical moisture content (CMC) and Equilibrium Moisture Content(EMC).
- iii. What are filter medium and filter aids explain with examples.
- iv. List out the Factors influencing corrosion.
- v. Write the advantages and disadvantages of Screw conveyor in transportation of solids.

2 Experiment 25

Major Practical (15)

Sub-Batch A - Determination of Particle size Analysis by Sieving

Sub-Batch B - Determination of Overall Heat transfer Coefficient by heat Exchanger.

Sub-Batch C - Determination of Particle size Analysis by Sieving

Sub-Batch D - Determination of Overall Heat transfer Coefficient by heat Exchanger.

Minor Practical (10)

Sub-Batch A - Determination of effect of Surface Area on Rate of Evaporation.

Sub-Batch B - Determination of effect of Thickness/Viscosity on Rate of Filtration.

Sub-Batch C - Determination of effect of Surface Area on Rate of Evaporation.

Sub-Batch D - Determination of effect of Thickness/Viscosity on Rate of Filtration.

3 Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER/II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. IV Semester/II Year
Section: A

Roll No.:

Subject Code: BP401T

Subject Name: Pharmaceutical Organic chemistry (POC)-III

Semester/Year: IV/II

Duration: 1Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short).

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define R and S form with suitable example	02
CO1	K2	2	Write about any one chemical method of determination of geometrical isomers with suitable example.	02
CO2	K1	3	Write about all the optical conditions of Atropisomerism.	02
CO2	K2	4	Give a brief description of absolute asymmetric synthesis with example.	02
CO2	K2	5	What is stereospecific reaction?	02

Section (B)

Note: Attempt any one question out of three, each carry 10 marks (Long Type).

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Explain all the conformations of cyclohexane with the help of suitable energy curve diagram.	10
CO1	K1	3	Write about all the rules of D/L system and R/S system of nomenclature with suitable example.	10

Section (C)

Note: Attempt any two out of three, each carry 5 marks (Short Type).

[2×5=10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Write about the point of differences between enantiomers and diastereomers.	05
CO1	K1	2	Define optical activity with the help of suitable diagram.	05
CO1	K1	3	What are the elements of symmetry. Give brief description of its all the forms with diagram.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. IV Semester/IIYear
Section: A

Roll No.:

Subject Code: BP401T

Subject Name: Pharmaceutical Organic chemistry (POC)-III

Semester/Year: IV/II

Duration: 1Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short).

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Write a note about basicity of pyridine.	02
CO2	K2	2	Write medicinal uses of imidazole	02
CO2	K1	3	Write structural and chemical difference between Isoquinoline and quinoline	02
CO3	K2	4	What is Fridel's craft acylation reaction?	02
CO3	K2	5	Draw resonating structures of pyrrole.	02

Section (B)

Note: Attempt any one question out of two, each carry 10 marks (Long Type). [1×10= 10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	Write about basic physical, chemical properties, synthesis and chemical reactions of Pyrrole/ Furan/ Thiophene.	10
CO3	K1	3	Explain Electrophilic substitution reaction with mechanism and mention all the type of electrophilic substitution reaction in one heterocyclic compound.	10

Section (C)

Note: Attempt any two out of three, each carry 5 marks (Short Type).

[2×5=10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	Explain Paal Knorr synthesis with mechanism in Oxazole OR Pyrrole.	05
CO2	K1	2	Illustrate Hantzsch- Widman Nomenclature with example.	05
CO2	K1	3	Write synthesis and reactions of Quinoline.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024 - 25
B. PHARM. (IV Semester)/(II)Year
Section: A

Roll No.:
Subject Code: BP402T
Subject Name: Medicinal Chemistry- I

Semester/Year: IV/ II
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short) [05×02 = 10]

CO	KL	S. No.	Question	Marks
CO1	KL1	1	Define Chelation and Bioisosterism.	02
CO1	KL1	2	Give the definition of Bioavailability.	02
CO1	KL1	3	What is Catecholamine ?	02
CO2	KL1	4	What is Sympathomimetic Agents?	02
CO2	KL1	5	What is Sympatholytic Agents ?	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S. No.	Question	Marks
CO1	KL1	1	Write a detailed note on Drug Metabolism.	10
CO1	KL2	2	Give a note on Phenylephrine & Solbutamol along with their synthesis.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S. No.	Question	Marks
CO2	KL2	1	Give a note on Tolazoline & Propranolol along with their synthesis.	05
CO2	KL1	2	Describe the synthesis & metabolism of catecholamine.	05
CO2	KL2	3	Write a detailed note on Adrenergic agonist & Adrenergic antagonist along with their classification.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024 - 25
B. PHARM. (IV Semester)/(II)Year
Section: A

Roll No.:
Subject Code: BP402T
Subject Name: Medicinal Chemistry- I

Semester/Year: IV/ II
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02 = 10]

CO	KL	S. No.	Question	Marks
CO2	KL1	1	Define cholinergic neurotransmitters.	02
CO2	KL1	2	Give the definition & structure of acetylcholine.	02
CO2	KL1	3	What is parasympathomimetic agents?	02
CO3	KL1	4	What is sedative & hypnotics?	02
CO3	KL1	5	What is psychosis?	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10 = 10]

CO	KL	S. No.	Question	Marks
CO2	KL1	1	Write a detailed note on classification and SAR of parasympathomimetic & parasympatholytic agents.	10
CO2	KL2	2	Give a note on carbachol, neostigmine & ipratropium bromide along with their synthesis.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5 = 10]

CO	KL	S. No.	Question	Marks
CO3	KL2	1	Give a note on diazepam, barbital & chlorpromazine hydrochloride along with their synthesis.	05
CO3	KL1	2	Describe the synthesis & metabolism of acetylcholine.	05
CO3	KL2	3	Write a detailed note on phenytoin, ethosuximide & carbamazepine along with their synthesis .	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID-TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM.- IV Semester/IIYear
Section:A

Roll No.:
Subject Code: BP403T
Subject Name: Physical Pharmaceutics-II

Semester/Year: IV/II
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks(Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define diffusion.	02
CO1	K2	2	Name the instruments used to determine turbidity.	02
CO2	K2	3	Define rheology.	02
CO1	K1	4	Define colloidal dispersion.	02
CO1	K1	5	What is Brownian motion?	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	What are the factors influencing the viscosity?	10
CO1	K1	2	Explain the concept of an electrical double layer.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Explain electrophoresis.	05
CO1	K1	2	Explain the classification of colloidal dispersion.	05
CO1	K2	3	Write down the comparative account of the general properties of colloids.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM: IV SEM/ IIYear
Section: A

Roll No.:
Subject Code: BP403T
Subject Name: Physical Pharmaceutics-II

Semester/Year: IV/ II
Duration: 1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	Define Newtonian fluids.	02
CO2	K2	2	Write the name of the viscometer used to measure viscosity of Newtonian and non-Newtonian fluids.	02
CO3	K1	3	Define compression and compaction.	02
CO3	K2	4	What are Non-Newtonian fluids?	02
CO3	K2	5	Define thixotropy.	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO3	K2	1	Write down the procedure on how to determine the viscosity of liquid using Ostwald viscometer with diagram.	10
CO2	K3	2	Explain the types of Non-Newtonian flow.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	Elaborate different types of viscosity.	05
CO3	K2	2	Explain measurement of thixotropy.	05
CO2	K2	3	Differentiate between Newtonian and non-Newtonian fluid.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARMACY II YEAR/ IV SEMESTER
Section: A

Roll No.:
Subject Code: BP404T
Subject Name: PHARMACOLOGY-I

Semester/Year: IV/II
Duration: 1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Questions	Marks
CO1	K1	1	Define Pharmacokinetics.	02
CO1	K1	2	Define Absorption.	02
CO3	K1	3	Define Distribution.	02
CO3	K1	4	Define Metabolism.	02
CO3	K1	5	Define Bioavailability.	02

Section (B)

Note: Attempt any One question out of Three, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Questions	Marks
CO1	K3	1	Discuss about the organization and functions of ANS in detail.	10
CO1	K1	2	Define Drug Target. Discuss in detail about the drug targets.	10
CO3	K3	3	Define Local Anesthetic in detail.	10

Section (C)

Note: Attempt any Two question out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S. No.	Questions	Marks
CO1	K3	1	Discuss about the Sympathomimetics in detail.	05
CO1	K3	2	Discuss about the Sympatholytic in detail.	05
CO3	K3	3	Discuss about the Parasympatholytic in detail.	05

Education is not preparation for life; education is life itself.

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARMACY II YEAR/ IV SEMESTER
Section: A

Roll No.:
Subject Code: BP404T
Subject Name: PHARMACOLOGY-I

Semester/Year: IV/II
Duration: 1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Questions	Marks
CO5	K1	1	Define Drug Addiction.	02
CO5	K1	2	Define Drug Abuse.	02
CO5	K1	3	Define Drug Dependence.	02
CO5	K1	4	Define Drug Tolerance.	02
CO4	K1	5	Define Nootropics.	02

Section (B)

Note: Attempt any One question out of Three, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Questions	Marks
CO4	K3	1	Define Parkinsonism and classify and discuss about the Levodopa in detail.	10
CO4	K1	2	Define Alzheimer's Disease and classify and discuss about the Nootropics in detail.	10
CO5	K3	3	Define Opioid Analgesics and classify and discuss about the Naloxone in detail.	10

Section (C)

Note: Attempt any Two question out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S. No.	Questions	Marks
CO1	K3	1	Define Myasthenia Gravis. Add a note on the drugs used in its treatment.	05
CO1	K3	2	Define Glaucoma. Add a note on the drugs used in its treatment.	05
CO3	K3	3	Define Neurohumoral Transmission and discuss about the neurotransmitters released from the CNS.	05

The whole purpose of education is to turn mirrors into windows.

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. (IV Semester)/(II)Year
Section: A

Roll No.:

Subject Code: BP-405 T

Subject Name: Pharmacognosy-I

Semester/Year:IV/II

Duration:1Hr.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define Pharmacognosy.	02
CO1	K1	2	What are Organized and Unorganized Crude Drugs?	02
CO1	K1	3	Write the different methods of classification of crude drugs?	02
CO1	K2	4	Define Adulteration? Explain any one method of classification & Evaluation of crude drugs?	02
CO1	K1	5	Mention different methods of evaluation of crude drugs?	02

Section (B)

Note: Attempt any One question out of Three, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K2	1	Explain any one method of classification & Evaluation of crude drugs?	10
CO2	K2	2	Define method of cultivation and factor influencing cultivation?	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO1	K2	1	Explain the role of chromatographic or spectroscopic techniques in the evaluation of crude drugs?	05
CO1	K1	2	Define adulteration with suitable examples?	05
CO1	K1	3	Give the classification of crude drug in detail?	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. IV SEMESTER/ II Year
Section: A

Roll No.:

Subject Code: BP-405 T

Subject Name: Pharmacognosy & Phytochemistry-I

Semester/Year: IV/II

Duration: 1Hr.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K3	1	Define Plant tissue culture & callus culture.	02
CO2	K3	2	Mention the composition of Plant tissue culture media.	02
CO1	K4	3	Define Glycosides & Flavonoids	02
CO2	K3	4	Mention the applications of Plant tissue culture.	02
CO1	K4	5	Define Volatile oils & Resins	02

Section (B)

Note: Attempt any One question out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO2	K4	1	What are alkaloids? Classify them and write their properties.	10
CO2	K4	2	Define Tannins. Classify them and write their properties	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K4	1	Write the role of Pharmacognosy in the development of allopathy system of medicine.	05
CO2	K3	2	Write about the maintenance and growth of plant cell culture	05
CO1	K3	3	Write a note on the Edible vaccines.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATION
SESSION : 2024-25

B. PHARMACY: IV Semester / II year
SECTION - A

Subject Code: BP406P

Subject Name: Medicinal Chemistry-I

Roll No. _____

Sem./Year:IV/II

Duration: 4 Hrs.

Maximum Marks: 40

I Synopsis (One word Question Answer)

[10×01 = 10marks]

1. Structure of catecholamine.
2. Structure of phenylephrine.
3. Structure of salbutamol.
4. Structure of tolazoline.
5. Structure of propranolol.
6. Name of Adrenergic receptors.
7. Name of Cholenergetic receptors.
8. What is sympathomimetic agents.
9. What is sympathlytic agents.
10. Difference between sympathetic and parasympathetic system.

II Experiments:

25

Major Practical

(15)

ODD : To prepare and submit benzeimidazole from o – phenylenediamine & report their percentage yield.

EVEN : To synthesized recrystallised product of bezocaine from para amino benzoic acid & report their percentage yield.

Minor Practical

(10)

ODD : To prepare and submit benzotriazole from o – phenylenediamine & report their percentage yield.

EVEN : To prepare and submit recrystallised dried product of phenytoin & report their percentage yield.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM PRACTICAL EXAMINATION
SESSION : 2024-25
B. PHARMACY IV Semester / II year
SECTION - A

Subject Code: BP406P
Subject Name: Medicinal Chemistry-I
Roll No. _____
Sem./Year:

Duration: 4 Hrs.
Maximum Marks: 40

I Synopsis (One word Question Answer)

[10×01 = 10marks]

1. Structure of diazepam.
2. Structure of barbitol.
3. Structure of phenytoin.
4. Structure of ethosuximide.
5. Structure of halothane.
6. Define sedative & hypnotic.
7. Define schizophrenia.
8. What is parasympathomimetic agents.
9. What is parasympathlytic agents.
10. Define general anaesthetics.

II Experiments:

25

Major Practical

(15)

ODD : To perform the assay of aspirin.

EVEN : To perform the assay of atropine.

Minor Practical

(10)

ODD : To perform the assay of ibuprofen.

EVEN : To determine partition coefficient of benzoic acid between benzene and water.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25

B. PHARMACY- IV Semester/ II year
SECTION-A

Subject Code: BP407P

Subject Name: Physical Pharmaceutics-II

Roll No. _____

Sem./Year: IV/ II

Duration: 4 Hrs.

Maximum Marks: 40

I Synopsis (One word Question Answer)

[10×01 = 10marks]

1. Define viscosity.
2. Full form of CMC.
3. Define Surface active agents.
4. What are suspending agents?
5. Name the instruments used to determine viscosity
6. Define lyophilic colloids
7. Give some examples of surface-active agents
8. Define colloidal dispersion
9. What is sedimentation?
10. What is the SI unit of viscosity?

II Experiments:

25

Major Practical

(15)

ODD: Determination of viscosity of liquid using Ostwald viscometer.

EVEN: Determination of sedimentation volume with effect of different concentrations of single suspending agent.

Minor Practical

(10)

ODD: Determination of sedimentation volume with effect of different concentrations of single suspending agent.

EVEN: Determination of viscosity of liquid using Ostwald viscometer.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25

B. PHARMACY- IV Semester/ II year
SECTION-A

Subject Code: BP407P

Subject Name: Physical Pharmaceutics-II

Roll No. _____

Duration: 4 Hrs.

Maximum Marks: 40

Sem./Year: IV/ II

I Synopsis (One word Question Answer)

[10×01 = 10marks]

1. Define compression.
2. Write down the different types of viscosity.
3. Define compaction.
4. What are non-Newtonian fluids?
5. Name the instruments used to determine the viscosity of the Newtonian fluid.
6. Define Newtonian fluids.
7. Name the instruments used to determine the viscosity of the non-Newtonian fluid
8. Write down the different types of non-Newtonian flow.
9. What is consolidation?
10. What is the SI unit of viscosity?

II Experiments:

25

Major Practical

(15)

ODD:Determine the angle of repose and the influence of lubricant on the angle of repose.

EVEN:Determination of sedimentation volume with the effect of different suspending agents.

Minor Practical

(10)

ODD:Determination of sedimentation volume with the effect of different suspending agents.

EVEN:Determine the angle of repose and the influence of lubricant on the angle of repose

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATIONS
ACADEMIC SESSION: 2024-25
B. PHARMACY: II YEAR/IV SEMESTER
SECTION-A

Subject Code: BP408P
Subject Name: PHARMACOLOGY-I
Roll No. _____
Sem./Year: IV/II

Duration: 4 Hrs.
Maximum Marks: 40

I Synopsis (One word Answer) [10×01 = 10 Marks]

1. Define Pharmacology.
2. Define Pharmacodynamics.
3. Define Receptor.
4. How many types are present in the body.
5. Define Intracellular Receptors.
6. Define Transmembrane Receptors.
7. Define Neurotransmitter.
8. Define Agonist.
9. Define Partial Agonist.
10. Define Inverse Agonist.

II Experiments: 25 Marks

A) Major Practical 15 Marks

ODD ROLL NO.: To study the effect of drugs on ciliary motility of frog esophagus.

EVEN ROLL NO.: To study the effect of drugs on rabbit eye.

B) Minor Practical 10 Marks

ODD ROLL NO.: To study the effects of skeletal muscle relaxants using Rota-rod apparatus.

EVEN ROLL NO.: To study the effects of on locomotor activity using Actophotometer.

III Viva-Voce 05 Marks

Education is not preparation for life; education is life itself.

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM PRACTICAL EXAMINATIONS
ACADEMIC SESSION: 2024-25
B. PHARMACY II YEAR/IV SEMESTER
SECTION-A

Subject Code: BP408P
Subject Name: PHARMACOLOGY-I
Roll No. _____

Duration: 4 Hrs.
Maximum Marks: 40
Sem./Year: IV/II

I Synopsis (One word Answer)

[10×01 = 10 Marks]

1. Define Pharmacotherapeutics.
2. Define Pharmacovigilance.
3. Define Nuclear Receptor.
4. How many types of Ion Channels are present in the body.
5. Define Extracellular Receptors.
6. Define Baro Receptors.
7. Define Osmoreceptors.
8. Define Drug Addiction.
9. Define Drug Elimination.
10. Define Prodrug.

II Experiments:

25 Marks

A) Major Practical

15 Marks

ODD ROLL NO.: To study the Anticonvulsant effect of drugs by MES and PTZ method.

EVEN ROLL NO.: To study the Study of effect of hepatic microsomal enzyme inducers on the phenobarbitone sleepingtime in mice.

B) Minor Practical

10 Marks

ODD ROLL NO.: To study the Study of stereotype and anti-catatonic activity of drugs on rats/mice.

EVEN ROLL NO.: To study the Effect of drugs on ciliary motility of frog esophagus

III Viva-Voce

05 Marks

Education's purpose is to replace an empty mind with an open one

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATION
SESSION: 2024-25

B. PHARMACY: II Semester /II year
SECTION-A

Subject Code: BP409P

Subject Name: Pharmacognosy & Phytochemistry-I

Roll No. _____

Sem. /Year: IV/II

Duration: 4 Hrs.

Maximum Marks: 40

I Synopsis (One word Question Answer)

[10×01 = 10marks]

1. Write the sources of starch.
2. What do you mean by aswelling index?
3. Define stomatal number.
4. Mention the types of dicot stomata.
5. Mention the confirmatory chemical test for starch.
6. What is camera lucida?
7. What is a stage micrometer?
8. What is an eyepiece micrometer or eyepiece graticule?
9. Mention the different types of calcium oxalate crystals found in plants.
10. The only dead part of phloem tissue is the _____.
A) sieve tubes B) Companioncells C) Phloemfibers D) Phloem parenchyma cells

II Experiments:

25

Major Practical

(15)

ODD: Determine the diameter of starch grains in the given sample

EVEN: Determine the length & width of Phloem fibers in the given sample.

Minor Practical

(10)

ODD: Determine the total magnification power of a microscope when using 10X objective Lense in combination with the 10X ocular lens. Explain the procedure and calculate the magnification for the above combination.

EVEN: Determine the value of each division on the eyepiece micrometer scale with the help of a stage micrometer.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARMACY IISemester/IIyear
SECTION-A

Subject Code:BP409P

Duration: 4 Hrs.

Subject Name:Pharmacognosy & Phytochemistry-I Maximum Marks: 40

Roll No. _____

Sem./Year:II/II

ISynopsis (MCQ or Fill ups or One word Question Answer)

[10×01 = 10marks]

1. What are carbohydrates?
2. Write the chemical test for Honey (Fiehe's test)
3. Write the Biological source & uses of Serratiopeptidase .
4. Write the Biological source & use of Papain.
5. Write the Biological source & use of Acacia
6. What are Hallucinogens?
7. Give examples of Plant fibers.
8. Name a few cardioactive agents obtained from Marine source.
9. Define Ash Value.
10. Write the significance of Foaming index.

II Experiments:

25

Major Practical

(15)

ODD: Determine the diameter of calcium oxalate crystals in the given sample by eye piece micrometer method.

EVEN: Determine the diameter of starch grains in the given sample by eye piece micrometer method.

Minor Practical

(10)

ODD:Identify the given unorganized crude drug by chemical test.

EVEN:Determine the total ash value of the given powdered crude drug.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. III / V
Section: A

Subject Code: BP501T

Subject Name: MC-II

Roll No. _____

Sem./Year: V / III

Duration: 1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks[05×02=10]

Questions		CO	KO	Marks
Q1	What are Anti histaminic agents	CO1	KO1	02
Q2	Define Histamine and anti-histamine	CO1	KO1	02
Q3	What is the full form of GPCR	CO1	KO1	02
Q4	What are Anti histaminic agents	CO1	KO1	02
Q5	Define anti neo Plastic agents	CO2	KO1	02
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks [01×10=10]

Questions		CO	KO	Marks
Q1	Give the Mechanism of Action & Synthesis, Uses of Diphenyl hydra mine hydrochloride	CO1	KO1	10
Q2	Discuss in detail about anti-anginal drugs	CO2	KO2	10
Total				10

Section C: Attempt any 2questionsout of 3, each carry 5 marks[02×05=10]

Questions		CO	KO	Marks
Q1	Give the Mechanisam of Action & Synthesis, Uses of Promethazine hydrochloride	CO1	KO1	05
Q2	Define and classify antihistaminic agents with examples	CO1	KO1	05
Q3	What are diuretics classify them	CO2	KO1	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MIDTERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. III Year/VSem.
Section:A

Subject Code: BP501T

Subject Name: Medicinal Chemistry - II

Duration:1Hrs.

Maximum Marks: 30

Roll No. _____

Sem./Year: _____

Section A: Attempt all questions, each carrying 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 Chemical structure of Nitroglycerine	CO2	KO1&KO2	02
Q2 Draw the labeled diagram of Nephron.	CO2	KO1&KO2	02
Q3 Write the difference between hypokalemia & hyperkalemia.	CO2	KO1&KO2	02
Q4 What is Congestive heart failure?	CO3	KO1&KO2	02
Q5 Define unstable angina.	CO3	KO1&KO2	02
Total			10

Section B: Attempt any 1question out of 2, each carrying 10 marks (LongType)[01×10=10]

Questions	CO	KO	Marks
Q1 Write a detailed note on Antihypertensive drugs.	CO2	KO1&KO2	10
Q2 What is arrhythmia, and anti-arrhythmic drugs' classification and mechanism of action?	CO2	KO1&KO2	10
Total			10

Section C: Attempt any 2questions out of 3, each carrying 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Give a note on vasodilators& explain nitroglycerine	CO3	KO1&KO2	05
Q2 Write a detailed note on antihyperlipidemic agents.	CO3	KO1&KO2	05
Q3 Write Structure, MOA, SAR, synthesis, and uses of Furosemide.	CO3	KO1&KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS

SESSION: 2024-25

B. PHARM. III year/VSem.

SECTION-A

Subject Code:BP502T

Subject Name:Industrial Pharmacy- I

Roll No. _____

Sem./Year:Vsem /III year

Duration: 1Hr.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions		CO	KO	Marks
Q1	Define Preformulation studies.	CO1	KO1	02
Q2	Define Polymorphism & Racemisation.	CO1	KO1	02
Q3	Define Hydrolysis & Oxidation.	CO1	KO1	02
Q4	Define tablets as per I.P.	CO2	KO1	02
Q5	Write down the 2 ideal characteristics of tablets.	CO2	KO2	02
Total				10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions		CO	KO	Marks
Q1	Describe in detail about physical properties for preformulation studies.	CO1	KO1	10
Q2	Discuss classification of tablets in detail.	CO2	KO2	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions		CO	KO	Marks
Q1	What is BCS classification? Discuss its significance.	CO1	KO2	05
Q2	Write down the applications of preformulation considerations.	CO1	KO3	05
Q3	Write down about the chemical properties for preformulation studies.	CO2	KO1	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS

SESSION: 2024-25

B. PHARM. III year/VSem.

SECTION-A

Subject Code:BP502T

Subject Name: Industrial Pharmacy- I

Roll No. _____

Sem./Year: Vsem /III year

Duration: 1Hr.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 Define excipients with examples.	CO2	KO1	02
Q2 Define manufacturing defects. Name 2 manufacturing defects.	CO2	KO1	02
Q3 Name the methods of tablet coating.	CO2	KO1	02
Q4 Name the evaluation parameters for liquid orals.	CO2	KO1	02
Q5 Differentiate between hard gelatin & soft gelatin capsules.	CO3	KO1	02
Total			10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Explain in detail about granulation methods & evaluation test of tablets.	CO1	KO2	10
Q2 Write down about the shape and size & formulation of hard gelatin capsules.	CO2	KO2	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Discuss in brief about tablet tooling.	CO1	KO1	05
Q2 Write down about the manufacturing defects in tablets.	CO1	KO2	05
Q3 Write a short note on production of hard gelatin capsule shells.	CO2	KO1	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. IV Year/ VII Sem.
Section : A

Subject Code: BP 503 T
Subject Name: Pharmacology-II
Roll No. _____
Sem./Year: _____

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions		CO	KO	Marks
Q1	Define cardio vascular system.	CO1	KO1 & KO2	02
Q2	What are the cardio electrophysiology.	CO1	KO1 & KO2	02
Q3	Enlist the types of CHF.	CO1	KO1 & KO2	02
Q4	Define shock.	CO2	KO1 & KO2	02
Q5	What are the diuretics.	CO2	KO1 & KO2	02
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions		CO	KO	Marks
Q1	Define CHF and give the Classification and Mechanism of action its drugs.	CO1	KO1 & KO2	10
Q2	Discuss about on detailed in antihypertension drugs.	CO1	KO1 & KO2	10
Total				10

Section C: Attempt any 2questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions		CO	KO	Marks
Q1	Give the short note on shock.	CO2	KO1 & KO2	05
Q2	Discuss on detailed cardio electrophysiology.	CO2	KO1 & KO2	05
Q3	Differentiate fast acting channel and slow acting channel.	CO2	KO1 & KO2	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. IV Year/ VII Sem.
Section : A

Subject Code: BP 503 T
Subject Name: Pharmacology-II
Roll No. _____
Sem./Year:

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions		CO	KO	Marks
Q1	Enlist the name of hematinics.	CO3	KO1 & KO2	02
Q2	Enlist the name of coagulants and anti-coagulants.	CO3	KO1 & KO2	02
Q3	Write about the plasma volume expanders.	CO3	KO1 & KO2	02
Q4	Write about the autacoids.	CO4	KO1 & KO2	02
Q5	Discuss about the hematinics and write the daily requirements of iron.	CO4	KO1 & KO2	02
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions		CO	KO	Marks
Q1	Discuss on detail about diuretics and give classification of the diuretics.	CO3	KO1 & KO2	10
Q2	Give the brief note on coagulants and anti-coagulants.	CO3	KO1 & KO2	10
Total				10

Section C: Attempt any 2questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions		CO	KO	Marks
Q1	Give the short note on autacoids .	CO4	KO1 & KO2	05
Q2	Write about the plasma volume expanders.	CO4	KO1 & KO2	05
Q3	Discuss on antiplatelet drugs.	CO4	KO1 & KO2	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER FIRST MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. 3rd/5th Year/Sem.
Section : A

Subject Code: BP504T
Subject Name: Pharmacognosy and phytochemistry-II
Roll No. _____
Sem./Year:5th/3rd

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 Give the family and use of Vinca?	CO1	KO3	02
Q2 Give the family and use of Belladonna?	CO1	KO3	02
Q3 Give the family and use of Opium?	CO1	KO3	02
Q4 Give the family and use of Tea?	CO1	KO3	02
Q5 Give the family and use of Cinnamon?	CO1	KO3	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Give the brief introduction about Vinca and Belladonna?	CO1	KO2	10
Q2 Give the brief introduction about Cinnamon and opium?	CO1	KO2	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Write about morphology family biological source and chemical constituents of Belladonna ?	CO1	KO3	05
Q2 Write about biological source, family, morpholy chemical constituents of Black catechu ?	CO1	KO3	05
Q3 Write about biological source, family, chemical constituents and morpholgy of Mentha?	CO1	KO3	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER SECOND MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. 3rd/5th Year/Sem.
Section : A

Subject Code: BP504T
Subject Name: Pharmacognosy and phytochemistry-II
Roll No. _____
Sem./Year:5th/3rd

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 What is extraction?	CO5	KO2	02
Q2 What is phytoconstituents?	CO3	KO1	02
Q3 Write the two method of extraction?	CO5	KO1	02
Q4 Give the example of two alkaloids?	CO2	KO2	02
Q5 What is chromatography?	CO5	KO1	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Define Menthol and Citral in detail?	CO3	KO1	10
Q2 Define shikimic acid pathway in detail?	CO1	KO2	10
Total			10

Section C: Attempt any 2questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Define percolation and maceration with diagram ?	CO5	KO2	05
Q2 Define drug Artemisinin and Forskolin ?	CO4	KO1	05
Q3 Define soxhlet apparatus in detail ?	CO5	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. III/Vth.
Section :A

Subject Code: BP505T
Subject Name: Pharmaceutical Jurisprudence
Roll No. _____
Sem./Year:

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 Write about schedule H.	CO2	KO1	02
Q2 Define Pharmaceutical Jurisprudence.	CO1	KO1	02
Q3 What are the duties of a Drug Inspector?	CO2	KO2	02
Q4 Define Schedule Y.	CO2	KO1	02
Q5 Mention the list of permitted colors in case of Drugs and cosmetics.	CO2	KO1	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Write about the list of requirements of Schedule M (Good Manufacturing Practices).	CO2	KO1	10
Q2 Write about the difference relations of Pharmacist.	CO3	KO2	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Write about difference between misbranded and adulterated drugs	CO2	KO2	05
Q2 What are the offences related to import of drug.	CO3	KO1	05
Q3 Give a brief description of schedule C & M and it's parts.	CO1	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARM. V/III
Section: A

Subject Code: BP505T
Subject Name: Pharmaceutical Jurisprudence
Roll No. _____
Sem./Year: V/III

Duration: 1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 Define CPCSEA and IEAC.	CO3	KO1	02
Q2 What do you mean by Psychotropic drugs?	CO3	KO1	02
Q3 Write brief description about bonded manufactory.	CO3	KO2	02
Q4 What do you mean by magic remedies?	CO4	KO1	02
Q5 Write about DPCO.	CO4	KO1	02
Total			10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Mention CPCSEA guidelines.	CO3	KO1	10
Q2 Write about authorities and officers of narcotic drugs and psychotropic substances act.	CO3	KO2	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Write Difference between Bonded and non-bonded laboratory.	CO4	KO2	05
Q2 Define NLEM and its objectives.	CO4	KO1	05
Q3 Write about offences and penalties of Medicinal and toilet preparation act.	CO4	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS, SEP-2024
SESSION: 2024-25

B. PHARM-III Year/V Sem.

Batch-A

Subject Code: BP 506 P

Subject Name: Industrial Pharmacy-I

Roll No. _____

Sem./Year:

Duration: 4 Hrs.

Maximum Marks: 40

1- Synopsis (MCQ or Fill ups or One word Question Answer) (10)

- Define preformulation studies.
- Write the chemical properties of preformulation
- Define Racemisation.
- Write the full form of BCS
- Define Buccal tablet.
- Define sublingual tablet.
- Define tablets as per I.P.
- Write down the 2 ideal characteristics of tablets.
- Define polymorphism.
- Give example of effervescent tablet.

2- Experiment (25)

Major Practical (15)

- Batch-A- To prepare ascorbic acid injection.
- Batch-B-To prepare and evaluate Paracetamol (PCM) tablet.

Minor Practical (10)

- Batch-A- To carry out the preformulation studies of given sample of drug.
- Batch-B-To perform quality control test of given sample.

3 Viva-Voce (05)

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS, NOV-2024

SESSION: 2024-25

B. PHARM-III Year/VSem.

Batch-B

Subject Code: BP 506 P

Subject Name: Industrial Pharmacy-I

Roll No. _____

Sem./Year:

Duration: 4 Hrs.

Maximum Marks: 40

1- Synopsis (MCQ or Fill ups or One word Question Answer) (10)

- Define capsule with example.
- Write the source of gelatin.
- Define pellets.
- Define containers.
- Write the quality control test of containers.
- Define propellant and its purpose in aerosol.
- Write the ingredients used in cold cream formulations.
- Write the uses of vanishing cream.
- Define cosmetics.
- Write the ingredients used in sunscreen formulation.

2- Experiment (25)

Major Practical (15)

- Batch-A- To carry out the evaluation of glass containers as per IP.
- Batch-B- To prepare and submit cold cream.
- Batch-C- To prepare and submit calcium gluconate injection .

Minor Practical (10)

- Batch-A- To perform the quality control test of capsule as per IP.
- Batch-B- To prepare and vanishing cream.
- Batch-C- To prepare and submit eye ointment.

3 Viva-Voce (05)

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM. Year/Sem.
Batch A

Subject Code: BP 507 P

Subject Name: Pharmacology-II

Duration: 4 Hrs.

Maximum Marks: 40

Roll No. _____

Sem./Year:

1 Synopsis (MCQ or Fill ups or One word Question Answer)

10

- I. Write the full form of PSS&ACE.
- II. Enlist the name of diuretics drugs.
- III. Define Diuretics.
- IV. Write about the antihypertensive drugs.
- V. Enlist the name of drugs is used on CHF.
- VI. Enlist the name of anti-hypertensive drugs.
- VII. Define cardio vascular system.
- VIII. Write the causes of hypertension.
- IX. Write the symptoms of CHF.
- X. Write about anti-inflammatory drugs.

2 Experiment

25

Major Practical

(15)

Sub-Batch A

Aim:- To study the introduction about in vitro pharmacology and physiological salt solution.

Sub-Batch B

Aim:- To study the Anti- inflammatory activity of drugs using carrageenan induced paw-edema model.

Sub-Batch C

Aim:- To study the introduction about in vitro pharmacology and physiological salt solution.

Sub-Batch D

Aim:- To study the Anti- inflammatory activity of drugs using carrageenan induced paw-edema model.

Minor Practical

(10)

Sub-Batch A

Aim:- To study the effect of drugs on isolated frog heart.

Sub-Batch B

Aim:- To study the diuretic activity of drugs using rat/ mice in metabolic cage.

Sub-Batch C

Aim:- To study the effect of drugs on isolated frog heart.

Sub-Batch D

Aim:- To study of diuretic activity of drugs using rat/ mice in metabolic cage.

3 Viva-Voce & Record.

05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARM.
Year/Sem. III/V
Batch B

Subject Code: BP507P
Subject Name: Pharmacology-II
Roll No. _____
Sem./Year: V/III

Duration: 4 Hrs.
Maximum Marks: 40

1 Synopsis (Very short type) 10

1. Write two drugs for Congestive heart failure.
2. What is Hypolipidemia?
3. What are coagulants and write two drugs of it.
4. What risk is not caused by human albumin?
5. Write the mechanism of sterol absorption inhibitors.

2 Experiment 25

Major Practical (15)

Sub-Batch A -To study analgesic activity with the help of "tail flick apparatus".

Sub-Batch B -To study bioassay of oxytocin using rat uterine horn by Interpolation methods.

Sub-Batch C -To study bioassay of acetylcholine on the isolated rectus abdomens muscle of a frog by Matching methods.

Sub-Batch D -To study the effects of drugs on Blood pressure and dog heart rate.

Minor Practical (10)

Sub-Batch A -To study bioassay of oxytocin using rat uterine horn by Interpolation methods.

Sub-Batch B - To study the effects of drugs on Blood pressure and dog heart rate.

Sub-Batch C - To study analgesic activity with the help of "tail flick apparatus".

Sub-Batch D -To study bioassay of acetylcholine on the isolated rectus abdomens muscle of a frog by Matching methods.

3 Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL
SESSION: 2024-25
B.PHARM.III Year/V Sem.
Batch A

Subject Code: BP508P

Duration: 4 Hrs.

Subject Name: Pharmacognosy & Phytochemistry-II

Maximum Marks: 40

Roll No. _____

Year/Sem: III/V

- 1. Synopsis 10**
- a) Give the family and biological source of Vinca?
 - b) Give the family and biological source of Asafodita?
 - c) Give the family and biological source of cinnamon?
 - d) Give the family and biological source of cinchona?
 - e) Full form of TLC and HPLC?
- 2. Experiment 25**
- Major Practical (15)**
- To study the powder microscopic characteristic of Cinnamon.
 - To study the powder microscopic characteristic of Cinchona.
 - To study the powder microscopic characteristic of Clove.
 - To isolate the Caffeine from Tea dust .
- Minor Practical (10)**
- To perform the chemical test of Asafoetida.
 - To perform the chemical test of Benzoin.
 - To perform the chemical tests of given crude drugs Aloes .
 - To perform the chemical tests of given crude drugs Myrrh.
- 3. Viva-Voce and Record 05**

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II Mid TERM PRACTICAL
SESSION: 2024-25
B.PHARM.III Year/V Sem.
Batch A

Subject Code: BP508P

Duration: 4 Hrs.

Subject Name: Pharmacognosy & Phytochemistry-II

Maximum Marks: 40

Roll No. _____

Year/Sem: III/V

- | | |
|---|-------------|
| 1. Synopsis | 10 |
| a) Define extraction? | |
| b) Give the family and use of Senna? | |
| c) Give the family and biological source of Belladonna? | |
| d) Give the two methods of extraction? | |
| e) Define volatile oil with one example? | |
|
 | |
| 2. Experiment | 25 |
| • Major Practical | (15) |
| 1. To isolate the Atropine from Belladonna. | |
| 2. To isolate the sennosides from senna. | |
| 3. To Separate the sugars by Paper chromatography. | |
| 4. To perform the TLC of herbal extract. | |
|
 | |
| • Minor Practical | (10) |
| 1. To perform the chemical test of Aloe. | |
| 2. To perform the chemical test of Myrrh. | |
|
 | |
| 3. Viva-Voce and Record | 05 |

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID-TERM THEORY EXAMINATION
SESSION: 2024 - 25
B. PHARM. (VI Semester)/III Year
Section: A

Roll No.:
Subject Code: BP-601T
Subject Name: Medicinal Chemistry III

Semester/Year: VI/III
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks

[05×02 = 10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	What is the basic structure of β -lactam antibiotics?	02
CO2	K1	2	Define the term "prodrug" with an example.	02
CO3	K1	3	What is the mode of action of aminoglycoside antibiotics?	02
CO3	K1	4	Name two macrolide antibiotics and their common uses.	02
CO3	K1	5	What is the mechanism of action of quinine in treating malaria	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10 = 10]

CO	KL	S. No.	Question	Marks
CO3	K2	1	Describe the classification, mechanism of action, and resistance mechanisms of penicillin.	10
CO3	K2	2	Discuss the etiology of malaria and the different classes of antimalarial drugs with examples.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5 = 10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	Explain the Structure-Activity Relationship (SAR) of β -lactam antibiotics with examples.	05
CO2	K2	2	Define and classify prodrug?	05
CO3	K2	3	Illustrate applications of prodrug?	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. VI Semester/III Year

Roll No.:
Subject Code: BP-601
Subject Name: Medicinal Chemistry-III

Semester/Year: VI/III
Duration: 1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define anti-tubercular agents and classify them with examples.	02
CO2	K1	2	What is the mechanism of action of Isoniazid?	02
CO3	K1	3	Explain the SAR of Quinolones.	02
CO2	K1	4	Name any four antiviral agents with their uses.	02
CO1	K1	5	What is Pharmacophore modeling?	02

Section (B)

Note: Attempt any one questions out of three, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	Discuss in detail about synthetic anti-tubercular agents with their mechanisms.	10
CO1	K2	2	Explain the physicochemical parameters used in QSAR with suitable examples.	10
CO1	K2	3	Describe combinatorial chemistry and its applications in drug discovery.	10

Section (C)

Note: Attempt any two out of three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	Describe the mechanism of action of Rifampicin.	05
CO2	K2	2	What are Urinary tract anti-infective agents? Give examples.	05
CO1	K2	3	What are docking techniques? Explain their role in drug design.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID-TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. VI semester/III year
Section: A

Roll No.:
Subject Code: BP602T
Subject Name: Pharmacology-III

Semester/Year: VI/III
Duration: 1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define expectorants and write the drug of it.	02
CO1	K2	2	Write any two drugs used in nasal decongestants.	02
CO1	K2	3	Write any two drugs of H ₂ receptor antagonist.	02
CO2	K1	4	What is Chemotherapy? Write any two diseases in which chemotherapy treatment is given.	02
CO2	K1	5	What is minimum inhibitory concentration	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K1&K2	1	Explain Bronchial asthma, the classification of drugs and the mechanism of action of bronchodilators.	10
CO1	K1&K2	2	Explain the regulation of gastric secretion and the classification of drugs for peptic ulcer.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Explain peptic ulcer and the mechanism of action of Proton pump inhibitors.	05
CO1	K2	2	Explain respiratory stimulants and write their major drugs.	05
CO2	K1&K2	3	Write the difference between bactericidal and bacteriostatic drugs based on their mechanism of action.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID-TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. VI/III
Section: A

Roll No.:
Subject Code: BP602T
Subject Name: Pharmacology-III

Semester/Year: VI/III
Duration: 1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	What are bulk-forming laxatives? Give an example.	02
CO1	K2	2	What are appetite stimulants?	02
CO1	K2	3	Name two dopamine antagonists used as anti-emetics.	02
CO2	K1	4	Mention two adverse effects of sulfonamides	02
CO2	K1	5	Name two factors affecting the effectiveness of chemotherapy	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K1 & K2	1	Write the difference between constipation and diarrhea, and the drug classification of both.	10
CO2	K1 & K2	2	Explain the general principles of chemotherapy, including selective toxicity, spectrum of activity, and drug resistance.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	What are emetics and anti-emetics, and write the drug classification of anti-emetic drugs.	05
CO2	K2	2	Describe the mechanism of action and therapeutics used by sulfonamides	05
CO2	K1 & K2	3	Explain cotrimoxazole, including its therapeutic uses and adverse effects.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTERst MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. VIth Semester)/ IIIrd Year
Section: A

Roll No.:

Subject Code: BP603T

Subject Name: Herbal drug technology

Semester/Year: VIth/IIIrd

Duration: 1Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Definition of Herbal drug medicine	02
CO1	K2	2	Define Nutraceuticals?	02
CO1	K	3	Types of pests	02
CO1	K	4	Sources of Herbs	02
CO1	K	5	What is biodynamic	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO2	K	1	Steps involve identification and authentication of herbal material	10
CO3	K	2	Explain About Nutraceuticals Categorized as follows based on the foods available in the Market?	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K	1	Differentiate techniques of method of pest control	05
CO3	K	2	Describe in detail Principles, guideline of GAP	05
CO2	K	3	Write down the nutraceutical role in Prevention of Diabetes?	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER IInd MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. VIth Semester)/ IIIrdYear
Section: A

Roll No.:

Subject Code: BP603T

Subject Name: Herbal drug technology

Semester/Year: VIth/IIIrd

Duration: 1Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	Definition of disintegrant?	02
CO3	K1	2	Write about lactone sources, chemical constituent and use?	02
CO3	K2	3	Enlist the flavoring agent?	02
CO4	K2	4	Define Patent?	02
CO4	K1	5	What is IPR and give the name of two category?	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO3	K3	1	Enlist and explain in detail about skin care product?	10
CO4	K4	2	Explain About stability testing for herbal drugs?	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO4	K5	1	Write a note on bioprospecting?	05
CO3	K5	2	Describe in detail Herbal cosmetics?	05
CO3	K4	3	Definition and classification Herbal excipient?	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. (VI-Semester)/(III)Year
Section: A

Roll No.:
Subject Code: BP 604T
Subject Name: Biopharmaceutics & Pharmacokinetics

Semester/Year: VI /III YEAR
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Give clinical significance of protein binding.	02
CO1	K1	2	Define renal clearance	02
CO1	K2	3	Write in short the factors affecting drug absorption	02
CO1	K1	4	Define bioavailability and bioequivalence.	02
CO1	K2	5	What are non per oral extra-vascular routes of drug absorption?	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S. No.	Question	Marks
CO1	K2	1	Define the term absolute bioavailability and relative bioavailability and explain the methods (any one) for determining bioavailability of a drug from its dosage form.	10
CO2	K2	2	Define absorption. Give a note on mechanism of drug absorption through GIT with special emphasis on transcellular absorption.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Write a note on physiological factors affecting absorption	05
CO2	K2	2	Write a note on dissolution theories.	05
CO1	K1	3	Write about kinetics of protein binding.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. (VI-Semester)/(III)Year
Section: A

Roll No.:
Subject Code: BP 604T
Subject Name: Biopharmaceutics & Pharmacokinetics

Semester/Year: VI /III YEAR
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short) [05×02 = 10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	Define compartment model.	02
CO3	K2	2	What is CL_R .	02
CO3	K1	3	Define steady state.	02
CO3	K2	4	What is zero order reaction.	02
CO4	K1	5	Define two compartment open model.	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	Define pharmacokinetic models. Give a brief description about compartment, non compartment and physiological models.	10
CO4	K2	2	Write a descriptive note on multi compartment open model and kinetics of multiple dosing.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	Write a note on one compartment open model intravenous (bolus) injection.	05
CO3	K2	2	Write a note on urinary excretion data.	05
CO4	K1	3	Write a note on intravenous infusion of two compartment model.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM.- 6th Semester/III Year
Section: A

Roll No.:
Subject Code: BP605T
Subject Name: Pharmaceutical Biotechnology

Semester/Year: VI/III
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short) [05×02 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Write about restriction Endonuclease & DNA ligase?	02
CO1	K2	2	Write a short note on cloning vector.	02
CO1	K1	3	What is Biotechnology with reference to Pharmaceutical sciences?	02
CO2	K2	4	What is the role of transducer in Biosensor?	02
CO2	K1	5	What is protein engineering?	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	What is the application of rDNA technology and genetic engineering in production of Insulin?	10
CO1	K2	2	What is Enzyme Biotechnology? Give some methods of enzyme immobilization & its application.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Give a exhaustive note on Polymerase chain reaction (PCR)..	05
CO2	K1	2	What do you understand by Interferon and its types?	05
CO2	K2	3	Explain the production of Amylase and Protease Enzymes.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM.- 6th Semester/III Year
Section: A

Roll No.:
Subject Code: BP605T
Subject Name: Pharmaceutical Biotechnology

Semester/Year: VI/III
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short) [05×02 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Write about immunostimulant?	02
CO1	K2	2	Write a short note on immunoglobulin.	02
CO1	K1	3	What is function of MHC?	02
CO2	K2	4	Define blood products.	02
CO2	K1	5	What is immunosuppressants?	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Discuss Hybridoma Technology in detail. Add a detail note on application of hybridoma technology.	10
CO1	K2	2	Classify Immunity, compare and contrast cellular and humoral immunity.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Give a exhaustive note on Hypersensitivity reaction.	05
CO2	K1	2	Write general method of preparation of bacterial vaccines?	05
CO2	K2	3	What are the storage condition and stability of serum.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. (VI Semester)/(III Year)
Section: A

Roll No.:

Subject Code: BP606T

Subject Name: Pharmaceutical Quality Assurance

Semester/Year: VI/III

Duration: 1Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define QBD & QESM.	02
CO1	K1	2	Differentiate QA and QC.	02
CO1	K1	3	Define Packaging and TQM.	02
CO2	K1	4	Name the participants of ICH.	02
CO2	K1	5	Define ISO 9000 & ISO 14000.	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Describe in detail ICH Guidelines: purpose, process of harmonization.	10
CO1	K2	2	Discuss Design, construction and plant layout along with maintenance of organization premises in detail.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Write short note on GMP	05
CO2	K1	2	Write short note on QESM	05
CO2	K1	3	Write short note on ISO 9000 & ISO 14000.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. (VI Semester)/(III Year)
Section: A

Roll No.:

Subject Code: BP606T

Subject Name: Pharmaceutical Quality Assurance

Semester/Year: VI/III

Duration: 1Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define WHO and GLP.	02
CO1	K1	2	Differentiate QA and QC.	02
CO1	K1	3	Define Containers and Packaging.	02
CO2	K1	4	Name the test for rubber closures.	02
CO2	K1	5	Define calibration & validation.	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K2	1	Write the test for glass containers and Ampoule sealing test.	10
CO1	K1	2	Define GLP and discuss provision regarding the organization, personnel and facilities.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K1	1	Write a short note on GLP.	05
CO2	K1	2	Write a short note on records and reports.	05
CO2	K1	3	Write a short note on waste disposal.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARMACY VI Semester/III year
SECTION- A

Subject Code: BP-607P

Duration: 4 Hrs.

Subject Name: Medicinal Chemistry III

Maximum Marks: 40

Roll No. _____

Sem./Year: VI/III

I Synopsis

[10×01 = 10marks]

1. Who discovered Penicillin?
2. Which class does Penicillin belong to?
3. What is the structure common to β -Lactam antibiotics?
4. Which antibiotic inhibits bacterial protein synthesis?
5. What is the first aminoglycoside discovered?
6. Which macrolide antibiotic is commonly prescribed for respiratory infections?
7. What is the mechanism of action of tetracyclines?
8. What is the disease caused by Plasmodium species?
9. Which quinoline is commonly used to treat malaria?
10. Which antimalarial is used for preventing malaria?

II Experiments:

25

Major Practical

(15)

ODD: To Synthesize Chlorobutanol from Acetone and Chloroform.

EVEN: To Synthesize Hexamine from Formaldehyde.

Minor Practical

(10)

ODD: To Synthesize Hexamine from Formaldehyde.

EVEN: To Synthesize Chlorobutanol from Acetone and Chloroform.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID-TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
B. PHARMACY VI Semester/III year

Subject Code: BP607P
Subject Name: Medicinal Chemistry III
Roll No. _____

Duration: 4 Hrs.
Maximum Marks: 40
Sem./Year: VI/III

I Synopsis

[10×01 = 10marks]

1. Full form of QSAR?
2. Define Pharmacophore?
3. What is the Purpose of docking?
4. Define Lead Compound?
5. Rifampicin Inhibits _____?
6. Ciprofloxacin belongs to which Class?
7. Use of Nitrofurantoin?
8. What is the class of Zidovudine?
9. Example of Protease inhibitors?
10. Use of Amantadine?

II Experiments:

25

Major Practical

(15)

ODD:To determine the % purity of the given sample of chlorpheniramine maleate.

EVEN:To synthesize triphenyl imidazole from benzil.

Minor Practical

(10)

ODD:To synthesize triphenyl imidazole from benzil.

EVEN:To determine the % purity of the given sample of chlorpheniramine maleate.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATION
SESSION: 2024-25
B. PHARMACY VI / III
SECTION- A

Subject Code: BP608P

Subject Name: Pharmacology-III

Roll No. _____

Sem./Year: VI / III

Duration: 4 Hrs.

Maximum Marks: 40

I Synopsis (Very short answer/Fill in the blanks)

[10×01 = 10marks]

1. Write any two drugs used in bronchial asthma.
2. Write the full form of COPD.
3. Define anti-tussive.
4. Write drugs used in nasal decongestant.
5. Define peptic ulcer.
6. Write the full form of GERD.
7. Write any two drugs used in constipation
8. Vomiting center is _____
9. Write any carminatives commonly used.
10. Write one drug of each following
 - a) Bacteriostatic
 - b) Bactericidal

II Experiments:

25

Major Practical

(15)

ODD: To prepare the stock solution and calculate dosage in experimental animal or preclinical studies.

EVEN: To study the effects of physostigmine and atropine on ciliary movement in frog buccal cavity.

Minor Practical

(10)

ODD: To study anti-ulcer activity by using the pylorus ligation method.

EVEN: To study the effect of saline purgative in frogs.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID-TERM PRACTICAL EXAMINATION
SESSION: 2024-25
B. PHARMACY VI/III
SECTION- B

Subject Code: BP608P

Subject Name: Pharmacology-III

Roll No. _____

Sem./Year: VI/III

Duration: 4 Hrs.

Maximum Marks: 40

I Synopsis (Very short answer) [10×01 = 10 marks]

1. Name a mucolytic drug.
2. What is asthma?
3. What is the use of montelukast?
4. Write the combination of the cotrimoxazole drug.
5. What is acidity?
6. What is domperidone used for?
7. Write any two broad-spectrum antibiotic drugs.
8. What is immunity?
9. What is penicillin?
10. What is an immunostimulant?

II Experiments: 25

Major Practical (15)

ODD: To study anti-ulcer activity by using the pylorus ligation method.

EVEN: To study the antihistaminic drugs with the help of a histamine chamber (mast cell stabilization).

Minor Practical (10)

ODD: To study the insulin hypoglycemic effect in rats.

EVEN: To study the test for pyrogen (Rabbit method).

III Viva-Voce 05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATION
SESSION: 2024-25

B. PHARMACY: VI Semester/ III year
SECTION-A

Subject Code: BP609P
Subject Name: Herbal drug technology
Roll No. _____
Sem./Year: VI/III

Duration: 4 Hrs
Maximum Marks: 40

I Synopsis (Short Question Answer)

[10×01 = 10marks]

1. Define herbal medicine?
2. What is biodynamic?
3. Define nutraceutical?
4. What are the sources of herbs?
5. Who is the Father of Ayurveda?
6. Give the name of book use in Ayurveda?
7. What is Pnachmahabhuta ?
8. What is Tridosha and Thriguna?
9. Give the form of Sidha medicine?
10. Name of disease imbalance of Tridosa?

II Experiments:

25

Major Practical

(15)

ODD: Preparation and evaluation of Turmeric cream.

EVEN: Phytochemical screening of aqueous extract of Neem.

Minor Practical

(10)

ODD: Determination of alcohol content of Asava and Arista

EVEN: Preparation and evaluation of Herbal lotion.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM PRACTICAL EXAMINATION
SESSION: 2024-25

B. PHARMACY VI Semester III year
SECTION-A

Subject Code:BP609P

Subject Name:Herbal drug technology

Roll No. _____

Sem./Year: VI/III

Duration: 4 Hrs

Maximum Marks: 40

I Synopsis (MCQ or Fill ups or One word Question Answer)

[10×01 = 10marks]

1. Family and species of Aloe vera?
2. Define herbal cosmetics?
3. Define IPR?
4. What is the herbal use of coconut oil?
5. Write the chemical constituent of starch?
6. Define herbal excipient?
7. What is herbal sweetener with examples?
8. What is use of diluent?
9. Define Patent?
10. Define Breeder's right?

II Experiments:

25

Major Practical

(15)

ODD: Preparation and evaluation of tablet.

EVEN: Preparation & standardization of methishikakai shampoo.

Minor Practical

(10)

ODD: Determination of aldehyde content.

EVEN: Preparation and evaluation of churna mixture.

III Viva-Voce

05

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY IV YEAR/ VII SEMESTER
SECTION-A

Subject Code:BP 701T
Sub Name:Instrumental Method of Analysis
Roll No. _____
Sem./Year:

Duration: 1Hrs.
Maximum Marks: 30

SECTION A

Attempt all questions, each carry 1 marks (Very Short)

[10×1=10]

1. Define spectroscopy.
2. What is chromophores.
3. Write the application of U.V spectroscopy.
4. Define stretching
5. Define detectors.
6. The most useful range of I.R spectroscopy is between 4000 and 400cm⁻¹. (T/F)
7. Nerst glower is the most useful source of radiation.(T/F)
8. Triplet state of fluorimetry is in which unpaired electron of same spin are present. (T/F).
9. The normal range of U.V extends from 100 to 400 nm.(T/F).
10. Wagging involves out plane bending.(T/F).

SECTION-B

Attempt any 1 out of 2 each carry 10 marks (Long Type)

[1x10=10]

1. Define I.R spectroscopy. Discuss its instrumentation with application.
2. Define spectroscopy. Explain the chromophores, auxochromes, bathochromic shift.

SECTION-C

Attempt any 2 out of 3 each carry 5 marks (Short Type)

[2×5=10]

1. Discuss the application of fluorimetry.
2. Explain sample handling in IR spectroscopy.
3. Discuss the deviation of Beer-Lamberts Law.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY IV YEAR/ VII SEMESTER
SECTION-A

Subject Code:BP 701T
Sub Name:Instrumental Method of Analysis
Roll No. _____
Sem./Year:

Duration: 1Hrs.
Maximum Marks: 30

SECTION A

Attempt all questions, each carry 1 marks (Very Short)

[10×1=10]

1. Define interferences
2. Write the application of nepheloturbidometry.
3. Write the principle of atomic absorption spectroscopy.
4. Define adsorption.
5. Define Rf value.
6. Define paper chromatography.
7. Write the advantages of HPLC
8. Define electrophoresis.
9. Write the instrumentation of TLC.
10. Define monochromator.

SECTION-B

Attempt any 1 out of 2 each carry 10 marks (Long Type)

[1×10=10]

1. Describe the principle instrumentation and application of Gas chromatography.
2. Explain the working principle and application of flame photometer with neat diagram.

SECTION-C

Attempt any 2 out of 3 each carry 5 marks (Short Type)

[2×5=10]

1. Discuss the factors affecting electrophoresis.
2. Give the differences between HPLC and GC
3. Discuss the development of techniques of paper chromatography.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS

SESSION: 2024-25

B. PHARMACY IV YEAR/ VII SEMESTER

Section A

Subject Code:BP702T

Subject Name:Industrial Pharmacy II

Roll No. _____

Sem./Year:

Duration: 1Hrs.

Maximum Marks: 30

SECTION A

Attempt all questions, each carry 2 marks (Very Short)[5×2=10]

1. Define Pilot Plant.
2. Write Full form of SUPAC.
3. Mention two application of Platform technology.
4. What are the advantages of Pilot studies.
5. Enlist 3 M's for Pilot plant are.

SECTION-B

Attempt any 1 out of 2 each carry 10 marks(Long Type) [1×10=10]

1. Briefly explain Pilot plant scale up consideration of Tablets.
2. Discuss the general factors to be considered in Pilot plant Scale up technology.

SECTION-C

Attempt any 2 out of 3 each carry 5 marks(Short Type) [2×5=10]

1. What are the Objectives and significance of Pilot Plant.
2. Explain SUPAC guidelines.
3. Discuss the uses of Platform technology.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25

B. PHARMACY IV YEAR/ VII SEMESTER

Section A

Subject Code : BP702T

Duration: 1Hrs.

Subject Name: Industrial Pharmacy II

Maximum Marks: 30

Roll No. _____

Sem./Year:

SECTION A

Attempt all questions, each carry 2 marks (Very Short) [5×2=10]

1. Name at least 4 agencies responsible for successful technology transfer in India.
2. State the role of one major technology transfer agency of India.
3. Define Quality risk assessment.
4. State Historical overview of Regulatory authority?
5. State Scope of WHO guideline .

SECTION-B

Attempt any 1 out of 2 each carry 10 marks (Long Type) [1×10=10]

1. Discuss WHO guidelines for Technology Transfer (TT).
2. Discuss Transfer from R& D to production (Process, Packaging and cleaning).

SECTION-C

Attempt any 2 out of 3 each carry 5 marks (Short Type) [2×5=10]

1. Discuss TIFAC and NRDC agencies in India.
2. Discuss Confidentiality Agreements, Legal issue and MOUs?
3. What is regulatory Affairs, Regulatory authorities, Role of Regulatory Affairs Department?

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARMACY IV Year/ VII Semester
Section: A

Subject Code: BP703T
Subject Name: Pharmacy Practice
Roll No. _____
Year/Semester: IV/VII

Duration: 1 Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [10×01=10]

1. Define hospital.
2. What is a Tertiary care hospital?
3. List out the supporting services required in a hospital.
4. Draw a typical layout of hospital pharmacy.
5. What are the objectives of material management in hospital pharmacy?
6. What is Primary Hospital?
7. Define Secondary Hospital.
8. Define Hospital Pharmacist.
9. Define Idiosyncrasy.
10. Define Pharmacokinetic Drug Interactions.

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type) [01×10=10]

1. Describe hospital organization with the help of flow chart.
2. Classify hospitals using different criteria and mention their functions.

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)[02×05=10]

1. Classify various types of hospitals with suitable examples.
2. What are the primary and secondary care hospitals?
3. Define ADR, write about the factors influencing ADR.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25

B. PHARMACY IV YEAR/ VII SEMESTER

Section A

Subject Code: BP-703T

Duration: 1:00 Hours

Subject Name: Pharmacy Practice

Maximum Marks: 30

Roll No. _____

SECTION A

Attempt all questions, each carry 1 marks (Very Short)

[10×1=10]

1. Define Community pharmacy.
2. Define Adverse Drug Reaction.
3. Define the term 'Ambulatory Patients'.
4. Define Hospital formulary.
5. Give two causes of medication non-adherence.
6. Differentiate between retail and wholesale drug store.
7. What do you mean by 'Therapeutic Drug Monitoring'.
8. Define labelling in drug distribution system.
9. Define Information Services.
10. Define Automatic stop order.

SECTION-B

Attempt any 1 out of 2 each carry 10 marks (Long Type)

[1×10=10]

1. Define the organization, functions and policies of the pharmacy and therapeutic committee in details.
2. Define Patient counseling and write down the steps involved in patient counseling in details.

SECTION-C

Attempt any 2 out of 3 each carry 5 marks (Short Type)

[2×5=10]

1. Write a short note on therapeutic drug monitoring.
2. Write a short note on medication adherence.
3. Write a short note on code of ethics in community pharmacy.

All the Best

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. IVYear/VII Sem.
Section :A

Subject Code: BP704T
Subject Name: Novel Drug Delivery System
Roll No. _____
Sem./Year: IV/VII

Duration:1Hrs.
Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks

[05×02=10]

Questions		CO	KO	Marks
Q1	What are sustained-release formulations?	CO1	KO1&KO2	02
Q2	Write the full forms of CRDDS, ER & SR.	CO1	KO1&KO2	02
Q3	What is pharmacokinetics and pharmacodynamics?	CO1	KO1&KO2	02
Q4	Give the two applications of the controlled release drug delivery system.	CO2	KO1&KO2	02
Q5	Describe enteric coated formulation?	CO2	KO1&KO2	02
Total				10

Section B: Attempt any 1 questions out of 2, each carry 10 marks [01×10=10]

Questions		CO	KO	Marks
Q1	What are the advantages & disadvantages of controlled release drug delivery system?	CO1	KO1&KO2	10
Q2	Explain the C_{max} & plasma drug concentration.	CO1	KO1&KO2	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 5 marks [2×5=10]

Questions		CO	KO	Marks
Q1	Give the rationale for controlled drug delivery system.	CO2	KO1&KO2	05
Q2	What is diffusion? Explain with suitable example.	CO2	KO1&KO2	05
Q3	What are the parameters for the selection of drug candidates for CRDDS?	CO2	KO1&KO2	05
Total				10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID-TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY IV YEAR/ VII SEMESTER
(Section -A)

Subject Code: BP704T
Subject Name: Novel Drug Delivery System.
Roll No. _____

Duration: 1:00 Hours
Maximum Marks: 30

SECTION A

Attempt all questions, each carry 1 marks (Very Short) [10×1=10]

1. Define controlled drug delivery system.
2. Name two polymers commonly used in controlled-release formulations.
3. What are mucosal drug delivery systems?
4. Define microencapsulation.
5. State two advantages of implantable drug delivery systems.
6. Give one disadvantage of controlled release formulations.
7. What is one application of microencapsulation?
8. Give an example of any biodegradable polymer.
9. What are natural polymers?
10. Which layer of skin acts as the primary barrier for drug permeation?

SECTION-B

Attempt any 1 question out of 2 each carry 10 marks (Long Type) [1×10=10]

1. Explain the various approaches to design-controlled release formulations based on diffusion, dissolution, and ion exchange principles.
2. Explain the routes of transdermal drug penetration and discuss the advantages and disadvantages of transdermal drug delivery systems (TDDS).

SECTION-C

Attempt any 2 questions out of 3 each carry 5 marks (Short Type) [2×5=10]

1. Explain the principle of mucoadhesion in mucosal drug delivery systems.
2. Describe the basic components and formulation approaches of transdermal drug delivery systems.
3. Discuss the role of polymers in controlled-release drug delivery systems, including their classification and properties.

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS, SEP-2024
SESSION: 2024-25
B. PHARM-IV Year/VII Sem.
Batch-A

Subject Code: BP 705 P

Duration: 4 Hrs.

Subject Name: Instrumental Methods of Analysis

Maximum Marks: 40

Roll No. _____

Sem./Year:

1- Synopsis (MCQ or Fill ups or One word Question Answer) (10)

- Define spectroscopy.
- Define chromophores.
- What is quenching.
- Write the source of radiation in u.v spectroscopy.
- Define fluorimetry.
- Write the application of IR spectroscopy
- What are auxochromes.
- Write Beer-Lamberts law.
- Define twisting.
- What is inductive effect.

2- Experiment (25)

Major Practical (15)

- Batch-A-To estimate the assay of dextrose by colorimetry.
- Batch-B-To determine the assay of paracetamol tablet by U.V spectroscopy.
- Batch-C-To demonstrate the study of HPLC

Minor Practical (10)

- Batch-A -To separate the given sample by TLC and calculate its R_f value.
- Batch-B-To carry out separation of amino acid by Paper Chromatography.
- Batch-C-To demonstrate the study of HPLC

3- Viva-Voce (05)

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS, NOV-2024
SESSION: 2024-25

B. PHARM-IV Year/VII Sem.

Batch-A

Subject Code: BP 705 P

Duration: 4 Hrs.

Subject Name: Instrumental Methods of Analysis

Maximum Marks: 40

Roll No. _____

Sem./Year:

1- Synopsis (MCQ or Fill ups or One word Question Answer) (10)

- Define chromatography.
- What is interference. Give its type.
- Write the full form of HPTLC.
- Define electrophoresis.
- Write the application of paper chromatography.
- Define Rf value.
- Define column used in GC.
- Define fluorimetry.
- Write the principle involved in TLC
- Write the application of chromatography.

2- Experiment (25)

Major Practical (15)

- Batch-A- To determine the test of chlorides and sulphates by nephelo turbidometry.
- Batch-B- To demonstrate Gas chromatography.
- Batch-C- To separate sugars by TLC.

Minor Practical (10)

- Batch-A – To separate the given sample of oil by TLC and calculate its Rf value.
- Batch-B- To demonstrate the study of HPLC.
- Batch-C- To separate amino acid by paper chromatography.

3- Viva-Voce (05)

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY- IV YEAR/ VIII SEMESTER
SECTION-A

Subject Code:BP 801T

Duration: 1Hrs.

Sub Name:Biostatistics And Research Methodology

Maximum Marks: 30

Roll No. _____

Sem./Year: VIII/4th

SECTION A

Attempt all questions, each carry 1 marks (Very Short)[10×1=10marks]

1. What do you mean by Biostatistics?
2. Define Mean.
3. Define Median.
4. Define Probability.
5. What do you understand by Multiple Correlation?
6. Define Range
7. What do you understand by Regression?.
8. What do you understand by Correlation?
9. Give the Demerits of Karl Pearsons Coefficient of Correlation.
10. Give the formula of Karl Pearsons Coefficient of Correlation.

SECTION-B

Attempt any 1 out of 2 each carry 10 marks (Long Type)

[1x10=10marks]

1. What do you understand by Standard Deviation?

The relative humidity in syrup production department of a Pharmaceutical unit is given in table, Calculate the SD in percent relative humidity

Days	Mon	Tue	Wed	Thu	Fri	Sat
x	55	60	65	69	75	65

2. Find the value of the correlation coefficient of the blood sugar level data given in the table for patient with different age group:

Subject	Age (x)	Blood Sugar level (y)
1	60	100
2	30	90
3	40	80
4	20	70
5	50	80

SECTION-C

Attempt any 2 out of 3 each carry 5 marks (Short Type)

[2×5=10marks]

1. Define Mode. Find Mode in following data: 2,4,3,2,3,5,8,7,2,9,11,25,2.
2. Find the Mean of following data: 12,11,25,47,5,9,8,36,51.
3. Find the Median of given data: 1,9,5,7,3,4,55,49,11.

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY- IV YEAR/ VIII SEMESTER

Subject Code: BP 801T

Sub Name: **Biostatistics And Research Methodology**

Roll No. _____

Duration: 1Hrs.

Maximum Marks: 30

Sem./Year : VIII/II

SECTION A

I. Attempt all questions, each carry 1 marks (Very Short) [10×1=10]

1. What is a non-parametric test?
2. What is research?
3. What does the Mann-Whitney U Test compare?
4. What is experimental design?
5. What is plagiarism?
6. What is a histogram?
7. What is a contour plot?
8. What affects sample size?
9. What is a clinical trial?
10. What is report writing in research?

SECTION-B

II. Attempt any 1 out of 2 each carry 10 marks (Long Type) [1×10=10]

1. Explain the Need for Research and Experimental Design Techniques.?
2. Explain Designing Clinical Trials and Various Phases.

SECTION-C

III. Attempt any 2 out of 3 each carry 5 marks (Short Type) [2×5=10]

1. Write a short note on Sample size determination.
2. How can plagiarism be avoided?
3. Write a short note on Pie chart uses.

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY- IV YEAR/ VIII SEMESTER
SECTION-A

Subject Code: BP802T

Sem./Year: VIII/IV

Sub Name: Social and Preventive Pharmacy

Duration: 1Hrs.

Roll No. _____ Maximum Marks: 30

SECTION-A

1. Attempt all questions, each carry 1 marks (Very Short)[10×1=10marks]

1. Write down the sources of Vitamin A.
2. Define Health.
3. What are the factors affecting public health?
4. Write two social problems of the sick.
5. What are the impacts of balanced diet on human health?
6. What are the main causes of Diabetes mellitus?
7. Define Hypertension.
8. What is the definitive symptom of Ebola?
9. What is the mode of transmission of Influenza?
10. Write down the symptoms of Chicken guinea.

SECTION-B

2. Attempt any 1 out of 2, each carry 10 marks (Long Type) [1x10=10marks]

1. Discuss Balanced nutrition. Describe the term malnutrition with its preventions.
2. Write about causes, symptoms, diagnosis, treatment options and method of prevention of cancer.

SECTION-C

3. Attempt any 2 out of 3 each carry 5 marks (Short Type) [2×5=10marks]

1. Describe the social problem of the sick
2. Describe the causes of the diseases?
3. Write short note on any two diseases:
Diabetes mellitus, SARS and Dengue

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
B. PHARM. (VIII Semester)/(IV Year)
Section: A

Roll No.:

Subject Code: BP802T

Subject Name: Social and Preventive Pharmacy

Semester/Year: VIII/IV

Duration: 1Hrs.

Maximum Marks: 30

Section (A)

1. Attempt all questions, each carry 1 marks (Very Short)

[10×01= 10]

1. Give symptoms of malaria.
2. Give deficiency symptoms of vitamin D.
3. Define health.
4. Write the full form of AIDS.
5. Write the full form of IDSP.
6. Define WHO
7. Define nutrition and nutrients.
8. Give symptoms of cancer.
9. Write the difference between prevention and control of disease.
10. Define balanced diet.

Section (B)

2. Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10= 10]

1. Give objective, functions and outcomes of National Health Programme for Tuberculosis.
2. Give objective, function outcomes of Universal Immunization Programme.

Section (C)

3. Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

1. Write a short note on HIV and AIDS.
2. Explain the role of WHO in India.
3. Write the short note on National Tobacco Control Programme.

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY- IV YEAR/ VIII SEMESTER
SECTION-A

Subject Code:BP 806 ET
Sub Name:QC&SH
Roll No. _____
Sem./Year: VIII/IV

Duration: 1Hrs.
Maximum Marks: 30

SECTION A

- 1. Attempt all questions, each carry 1 marks (Very Short)[10×1=10marks]**
1. Crude Drug
 2. Sources of Crude Drug
 3. cGMP
 4. GMP
 5. GACP
 6. GLP
 7. Foam Test
 8. Dragendroff's Test
 9. Million's Test
 10. Evaluation of crude drugs

SECTION-B

- 2. Attempt any 1 out of 2 each carry 10 marks (Long Type) [1x10=10marks]**
1. Explain traditional system of medicines.
 2. WHO guidelines for quality control of herbal drugs.

SECTION-C

- 3. Attempt any 2 out of 3 each carry 5 marks (Short Type) [2×5=10marks]**
1. Note on drug evaluation.
 2. WHO guidelines for GACP.
 3. WHO guidelines for cGMP.

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY- IV YEAR/ VIII SEMESTER
SECTION-A & B

Subject Code:BP806 ET

Sub Name:QC&SH

Roll No. _____

Sem./Year: VIII/IV

Duration: 1Hrs.

Maximum Marks: 30

SECTION A

- 1. Attempt all questions, each carry 1 marks (Very Short) [10×1=10]**
1. Crude Drug
 2. EU
 3. ICH
 4. GMP
 5. cGMP
 6. TLC
 7. HPTLC
 8. HPLC
 9. UPLC
 10. GC-MS

SECTION-B

- 2. Attempt any 1 out of 3 each carry 10 marks (Long Type) [1×10=10]**
1. Explain quality control of Herbal Medicines.
 2. Explain objectives and importance of GMP.

SECTION-C

- 3. Attempt any 2 out of 3 each carry 5 marks (Short Type) [2×5=10]**
1. Note on Stability of Herbal Medicines.
 2. Note on Chromatography.
 3. Note on applications of Thin Layer Chromatography.

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY- IV YEAR/ VIII SEMESTER
SECTION-A

Subject Code:BP 811ET

Sub Name: Advanced Instrumentation Techniques

Roll No. _____

Sem./Year:VIII/IV

Duration: 1Hrs.

Maximum Marks: 30

SECTION A

- 1. Attempt all questions, each carry 1 marks (Very Short) [10×1=10marks]**
1. Define Chemical ionization.
 2. Define coupling constant.
 3. Define MALDI.
 4. Write the application of DSC?
 5. Write the applications of H-NMR.
 6. Define the term X- ray.
 7. Give the full form of TGA.
 8. What is X ray diffraction.
 9. Define fragmentation.
 10. Write two applications of TGA

SECTION-B

- 2. Attempt any 1 out of 3 each carry 10 marks (Long Type) [1x10=10marks]**
1. Explain the principle, instrumentation and applications of mass spectrometry.
 2. Explain the principle, instrumentation and applications of H-NMR spectroscopy

SECTION-C

- 3. Attempt any 2 out of 3 each carry 5 marks (Short Type) [2×5=10marks]**
1. Write a short note on DSC.
 2. Explain crystallography.
 3. Write the factor affecting chemical shift

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
B. PHARMACY- IV YEAR/ VIII SEMESTER
SECTION-A

Subject Code:BP 811ET
Sub Name: Advanced Instrumentation Techniques
Roll No. _____
Sem./Year:VIII/IV

Duration: 1Hrs.
Maximum Marks: 30

SECTION A

1. Attempt all questions, each carry 1 marks (Very Short) [10×1=10marks]

1. Define extraction.
2. Define calibration.
3. Define validation.
4. Write the application Radio immune assay?
5. Write the applications of H-NMR.
6. What is flame fluorimetry
7. Give the full form of USFDA.
8. What is solid phase extraction.
9. Define spectroscopy
10. Write two applications of UV spectroscopy

SECTION-B

2. Attempt any 1 out of 2 each carry 10 marks (Long Type) [1x10=10marks]

1. Explain the principle, instrumentation and applications of Radio immuno assay.
2. Explain the calibration and validation of UV spectrophotometer

SECTION-C

3. Attempt any 2 out of 3 each carry 5 marks (Short Type) [2×5=10marks]

1. Write a short note on solid liquid extraction
2. Explain about calibration and validation as per ICH guidelines.
3. Write the short note on HPLC.

M. Pharm
(Pharmacology)
AY-2024-2025

All Mid Term Question Paper

(Odd & Even Semester)

(Theory + Practical)

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
M. PHARM. I Year/ I Sem.

Subject Code:MPL101T **Duration:**1Hrs.
Subject Name: MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES **Maximum Marks: 30**
Roll No. _____
Sem./Year:

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions	CO	KO	Marks
Q1 Define Beer-Lambert's Law with equation.	CO1	KO1	02
Q2 Write different parts of Instrumentation of UV spectroscopy.	CO1	KO2	02
Q3 Write applications of IR Spectroscopy	CO1	KO2	02
Q4 Write about theory of Fluorescence	CO1	KO1	02
Q5 Write the principle of Flame emission spectroscopy	CO1	KO1	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 ERxplain in detail about the vibrational frequencies, Instrumentation and Interpretation of IR spectroscopy	CO1	KO3	10
Q2 Explain in detail about Quenchers, Instrumentation and Applications of Spectrofluorimetry.	CO1	KO3	10
Total			10

Section C: Attempt any 2questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Write about the sample handling in IR spectroscopy	CO1	KO2	05
Q2 Instrumentation, Interferences and applications of Flame emission spectroscopy	CO1	KO2	05
Q3 Instrumentation, Interferences and applications of Atomic Absorption spectroscopy	CO1	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
M. PHARM. I Year/ I Sem.

Subject Code: MPL101T

Duration: 1Hrs.

Subject Name: Modern Pharmaceutical Analytical Techniques

Maximum Marks: 30

Roll No. _____

Sem./Year: _____

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 Write the principle involved in HPLC.	CO4	KO1	02
Q2 Write the applications of Column Chromatography	CO4	KO1	02
Q3 What does Bragg's Law state in X-Ray Crystallography	CO5	KO1	02
Q4 Write the Principle involved in TGA	CO5	KO1	02
Q5 What is Iso electric focusing. Explain.	CO3	KO1	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Write the principle, instrumentation, drug isolation, data interpretation and applications of Gas Chromatography.	CO4	KO3	10
Q2 Write the Principle, working, Ion selective Electrodes and applications of Potentiometry	CO3	KO3	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Principal, apparatus, Instrumentation and applications of Thin layer Chromatography	CO4	KO2	05
Q2 Instrumentation, working and factors effecting separation of Paper Electrophoresis.	CO5	KO2	05
Q3 Principle, instrumentation, adavantages, disadvantages and applications of DTA.	CO5	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
M. PHARM. Year/Sem.

Subject Code: MPL 102T

Duration: 1Hrs.

Subject Name: ADVANCED PHARMACOLOGY – I

Maximum Marks: 30

Roll No. _____

Sem./Year:

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 Define drug absorption.	CO1	KO1	02
Q2 Define drug distribution.	CO1	KO1	02
Q3 Define biotransformation.	CO1	KO1	02
Q4 Define protein Binding.	CO1	KO1	02
Q5 Define Mechanism of drug action.	CO1	KO1	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Write about pharmacokinetic models.	CO1	KO1	10
Q2 Define 'disposition' and 'distribution' of drugs.	CO1	KO1	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)

[2×5=10]

Questions	CO	KO	Marks
Q1 Write a short note on drug distribution.	CO1	KO1	05
Q2 Write a short note on Mechanism of drug action.	CO1	KO1	05
Q3 Discuss Significance of Protein binding.	CO1	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
M. PHARM. Year/Sem.

Subject Code: MPL 102T

Duration: 1Hrs.

Subject Name: ADVANCED PHARMACOLOGY – I

Maximum Marks: 30

Roll No. _____

Sem./Year:

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 Write about pharmacokinetic models.	CO2	KO1	02
Q2 Define and explain “affinity “and ”Intrinsic activity” in drug action.	CO2	KO1	02
Q3 Write short notes on GABA and GLUTAMATE	CO2	KO1	02
Q4 Write about distribution, agonist and antagonists of cholinergic receptors.	CO3	KO1	02
Q5 Classify sympathomimetic and parasympatholytics	CO3	KO1	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Explain in brief about role of GABA transmission in CNS.	CO2	KO1	10
Q2 Write the physiological role of G-Proteins.	CO3	KO1	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)

[2×5=10]

Questions	CO	KO	Marks
Q1 Write a note on prostaglandins.	CO5	KO1	05
Q2 Write a note on verapamil.	CO4	KO1	05
Q3 Write a note on cholinesterase inhibitors.	CO2	KO2	05
Total			10

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I-MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
M. PHARMACY I Year/ I Semester

Subject Code: MPL103T

Duration:1 Hrs.

**Subject Name: PHARMACOLOGICAL AND TOXICOLOGICAL SCREENING
METHODS - I**

Maximum Marks: 30

Roll No. _____

Sem./Year:

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 Enlist Common laboratory animals.	1	1	02
Q2 Discuss about the applications of different species and strains of animals.	1	1	02
Q3 Define Anesthesia and euthanasia.	1	1	02
Q4 Discuss about the Bioassay and the principle involved.	1	1	02
Q5 Elaborate CPCSEA & GLP.	1	1	02
Total			10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type) [01×10=10]

Questions	CO	KO	Marks
Q1 Define CNS Pharmacology. Discuss about the CNS Pharmacology in detail with animal models.	2	2	10
Q2 Define neurodegenerative diseases. Discuss about the Drugs for neurodegenerative diseases in detail with animal models.	2	2	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type)

[2×5=10]

Questions	CO	KO	Marks
Q1 Define Transgenic animals. Discuss about the production, maintenance and applications of them in detail.	1	2	05
Q2 Discuss about the CPCSEA guidelines to conduct experiments on animals in detail.	1	2	05
Q3 Discuss about the maintenance and breeding of laboratory animals in detail.	1	2	05
Total			10

Live as if you were to die tomorrow. Learn as if you were to live forever

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER SECOND MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
M. PHARM. I Year/ I Sem.

Subject Code: MPL103T

Subject Name: Pharmacological and Toxicological Screening Methods – I

Roll No:

Sem./Year:

Duration: 1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions		CO	KO	Marks
Q1	What is <i>in vivo</i> screening?	2	1	02
Q2	What are anti-emetics?	3	1	02
Q3	Define analgesics.	2	1	02
Q4	Define antihypertensives and give one example.	2	1	02
Q5	Define immunosuppressants with one example.	3	1	02
Total				10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type) [01×10=20]

Questions		CO	KO	Marks
Q1	Discuss the pharmacology, mechanisms of action, and clinical applications of anti-asthmatics, anti-COPD drugs, and anti-allergic agents.	3	2	10
Q2	Discuss the pharmacology, mechanisms, and therapeutic roles of antihypertensives, antiarrhythmics, and antianginal agents in cardiovascular therapy.	2	2	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 05 marks (Short Type) [02×05=10]

Questions		CO	KO	Marks
Q1	List the classes of anti-ulcer drugs and briefly explain their mechanisms of action.	3	2	05
Q2	What are hepatoprotective agents, and why are they essential in drug development?	2	2	05
Q3	Describe the general principles of immunoassay and its relevance in pharmacology.	1	1	05
Total				10

All the Best.

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MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
EVEN SEMESTER FIRST MID TERM THEORY EXAMINATIONS
SESSION: 2024-25

M. PHARM. I Year/ I Sem.

Subject Code: MPL104T

Subject Name: Cellular and Molecular Pharmacology

Roll No:

Sem./Year:

Duration: 1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions		CO	KO	Marks
Q1	Define a cell and briefly describe its major organelles.	CO1	KO1	02
Q2	Define the cell cycle.	CO1	KO1	02
Q3	Briefly describe necrosis.	CO1	KO1	02
Q4	Define intercellular signalling.	CO2	KO1	02
Q5	Name two types of receptor families	CO2	KO2	02
Total				10

Section B: Attempt any 2 questions out of 3, each carry 10 marks (Long Type) [02×10=20]

Questions		CO	KO	Marks
Q1	Discuss the process and importance of gene mapping and gene sequencing.	CO1	KO2	10
Q2	Explain genome organization and its significance in gene regulation.	CO1	KO2	10
Q3	Describe the classification of receptor families and explain the molecular structure and function of ligand-gated ion channels, G-protein coupled receptors, tyrosine kinase receptors, and nuclear receptors.	CO2	KO1	10
Total				20

All the Best.

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MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER SECOND MID TERM THEORY EXAMINATIONS
SESSION: 2024-25

M. PHARM. I Year/I Sem.

Subject Code: MPL104T

Subject Name: Cellular and Molecular Pharmacology

Roll No:

Sem./Year:

Duration: 1Hrs.

Maximum Marks: 30

Section A: Attempt all questions, each carry 2 marks (Very Short) [05×02=10]

Questions		CO	KO	Marks
Q1	What is the principle of DNA electrophoresis?	2	1	02
Q2	Define reverse transcription PCR (RT-PCR).	3	1	02
Q3	Define ELISA and mention one of its applications.	2	1	02
Q4	What is gene therapy?	2	1	02
Q5	Define pharmacogenomics.	3	1	02
Total				10

Section B: Attempt any 1 question out of 2, each carry 10 marks (Long Type) [01×10=20]

Questions		CO	KO	Marks
Q1	Discuss the different types of restriction enzymes used in recombinant DNA technology.	3	2	10
Q2	Provide an overview of the role of immunotherapeutics in managing cancer and autoimmune diseases, with case studies.	2	2	10
Total				10

Section C: Attempt any 2 questions out of 3, each carry 05 marks (Short Type) [02×05=10]

Questions		CO	KO	Marks
Q1	Describe the process of gene sequencing and its significance in genomics.	2	2	05
Q2	Compare genomics, proteomics, and metabolomics.	2	2	05
Q3	Describe the role of genetic variation in G-protein coupled receptors (GPCRs) and its effect on pharmacology.	1	1	05
Total				10

All the Best.

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MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
M. PHARMACY I Year/I Semester
SECTION A

Subject Code: MPL105P

Duration: 4 Hrs.

Subject Name: PHARMACOLOGICAL PRACTICAL - I

Maximum Marks: 40

Roll No. _____

Sem./Year:

ISynopsis (MCQ or Fill ups or One word Question Answer)

10

1. Define Anesthesia.
2. Define Euthanasia.
3. Define Diuretics.
4. Define Peptic Ulcer.
5. Define Oral Glucose Tolerance Test.
6. Define Cell Viability Test.
7. Define Comet Assay.
8. Define Enzyme Induction.
9. Define Enzyme Inhibition.
10. Define Depression.

II Experiment

25

Major Practical

(15)

ODD:Evaluation of CNS stimulant and depressant.

EVEN:Evaluation of anxiogenics and anxiolytic, anticonvulsant activity.

Minor Practical

(10)

ODD:Evaluation of analgesic and anti-inflammatory activity.

EVEN:Evaluation of local anesthetic, mydriatic and miotic activity.

III Viva-Voce

05

"Education is the most powerful weapon which you can use to change the world."

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
M. PHARMACY I Year/I Semester
SECTION A

Subject Code: MPL105P

Subject Name: PHARMACOLOGICAL PRACTICAL - I

Roll No. _____

Sem./Year:

Duration: 4 Hrs.
Maximum Marks: 60

ISynopsis (MCQ or Fill ups or One word Question Answer)	20
1. Define Chromatography.	
2. Define Spectroscopy.	
3. Define Analgesic.	
4. Define Anti-Inflammatory.	
5. Define CNS Stimulant.	
6. Define PCR.	
7. Define CNS Stimulant.	
8. Define CNS Depressant.	
9. Define Anticonvulsant .	
10. Define Western Blotting.	
II Experiment	30
Major Practical	(20)
ODD: Quantification of Protein by Western Blotting.	
EVEN: Gene amplification by PCR..	
Minor Practical	(10)
ODD: Isolation and identification of DNA from various sources.	
EVEN: DNA fragmentation assay by agarose gel electrophoresis.	
III Record & Viva-Voce	10

"Education is the most powerful weapon which you can use to change the world."

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
M. PHARM.: II Semester/I Year

Roll No.:
Subject Code: MPL201T
Subject Name: Advanced Pharmacology-II

Semester/Year:II/I
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	What is Endocrine Pharmacology?	02
CO1	K1	2	Classify Antithyroid drugs.	02
CO2	K1	3	Define Chemotherapy.	02
CO2	K1	4	Give two examples of Immunosuppressant and immunostimulant Drugs	02
CO2	K1	5	Give one example for β lactam, aminoglycoside, quinolone and Macrolide antibiotic.	02

Section (B)

Note: Attempt any One question out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K2	1	Discuss about the chemotherapy of cancer.	10
CO1	K2	2	Explain about the Drugs affecting calcium regulation.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO2	K2	1	Write a note on Oral Contraceptives.	05
CO2	K2	2	Write a short note on drugs used in the treatment of Helminthiasis.	05
CO2	K2	3	Write about cellular and biochemical mediators of Inflammation.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID-TERM THEORY EXAMINATION
SESSION: 2024-25
M. PHARM: II Semester/I Year

Roll No.:
Subject Code: MPL201T
Subject Name: Advanced Pharmacology-II

Semester/Year:II/I
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
3	1	1	Give examples of Immunosuppressant & immunostimulant drugs	02
4	1	2	Classify drugs used in constipation	02
4	1	3	Classify antiulcer drugs	02
3	1	4	What is chemotherapy? write its classification based on intent.	02
4	1	5	What is circadian rhythm? Give examples	02

Section (B)

Note: Attempt any One question out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
3	2	1	Write the Chronotherapy in Diabetes	10
4	2	2	Discuss the pharmacotherapy of COPD	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
4	2	1	What is Irritable Bowel syndrome? Write its treatment.	05
3	2	2	Write about the drugs used in protozoal infections?	05
3	2	3	Write a note on Hypersensitivity reactions.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024 - 25
M. PHARM.: II Semester/I Year

Roll No.:

Subject Code: MPL202T

Subject Name: PHARMACOLOGICAL & TOXICOLOGICAL SCREENING METHODS II

Semester/Year: II/I

Duration: 1 Hrs.

Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02 = 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	Define Toxicology and its types in general.	02
CO1	K1	2	What are Good Laboratory practices?	02
CO2	K1	3	What are OECD principles of GLP?	02
CO2	K1	4	Write about Schedule Y of GLP.	02
CO1	K1	5	What are the different types of primary Toxicity studies conducted?	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10 = 10]

CO	KL	S. No.	Question	Marks
CO1	K3	1	Explain in detail about the regulatory guidelines for conducting the toxicology studies as per OECD guidelines	10
CO2	K3	2	Discuss in detail about Acute , sub acute and chronic oral studies as per OECD guidelines	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5 = 10]

CO	KL	S. No.	Question	Marks
CO1	K2	1	Discuss the OECD principles of Good Laboratory Practice.	05
CO1	K2	2	Explain the Importance of GLP in Drug development.	05
CO2	K2	3	Write a note on Dermal toxicity studies	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024 - 25
M. PHARM. II Semester)/I Year

Roll No.:
Subject Code: MPL202T
Subject Name: PHARMACOLOGICAL & TOXICOLOGICAL SCREENING METHODS II

Semester/Year: II/I
Duration: 1 Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)/(MCQ)/(T/F) [05×02 = 10]

CO	KL	S. No.	Question	Marks
CO3	K1	1	What is Reproductive Toxicology studies.	02
CO3	K1	2	Define Teratogenecity.	02
CO4	K1	3	Define IND.	02
CO4	K1	4	What is Safety Pharmacology Study?	02
CO5	K1	5	Define Toxicokinetics	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10 = 10]

CO	KL	S. No.	Question	Marks
CO4	K3	1	Explain in detail about the list of studies needed for IND submission.	10
CO5	K3	2	Write in detail about Toxicokinetic Evaluation in pre-clinical study.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5 = 10]

CO	KL	S. No.	Question	Marks
CO3	K2	1	Write a note on male Reproductive Toxicity studies.	05
CO4	K2	2	Write the concept and Importance of Safety in Pharmacology.	05
CO5	K2	3	Write the alternative methods involved in Animal Toxicity testing.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
M. PHARM.: II Semester/I Year

Roll No.:
Subject Code: MPL203T
Subject Name: Principles Of Drug Discovery

Semester/Year: II/I
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks(Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
1	1	1	Write briefly about the Role of transgenic animals in target validation?	02
1	1	2	Define proteomics	02
1	1	3	Define genomics	02
2	1	4	Define Lead Identification	02
2	1	5	Write briefly on applications of NMR	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
1	1	1	Describe the importance of target identification and target validation in drug discovery.	10
2	1	2	Compare and contrast traditional drug discovery with modern approaches.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
1	2	1	Describe the various methods and strategies involved in the drug discovery process.	05
2	2	2	Discuss role of transgenic animals in target validation	05
1	2	3	Write elaborately on computational methods for protein structure prediction and its application in drug design.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
M. PHARM. (II Semester)/(I Year)

Roll No.:
Subject Code: MPL203T
Subject Name: Principles Of Drug Discovery

Semester/Year: II/I
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)/(MCQ)/(T/F) [05×02= 10]

CO	KL	S. No.	Question	Marks
3	1	1	Write briefly about Traditional vs rational drug design	02
2	1	2	Define Protein	02
2	1	3	Define motifs	02
3	1	4	Define Rational Drug design	02
3	1	5	Write briefly on methods followed in traditional drug design	02

Section (B)

Note: Attempt any One questions out of Two, each carry 10 marks (Long Type) [1×10= 10]

CO	KL	S. No.	Question	Marks
2	3	1	Discuss the application of NMR and X-ray crystallography in protein structure prediction.	10
2	2	2	Discuss Domains in Protein structure.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5=10]

CO	KL	S. No.	Question	Marks
2	3	1	What are in silico lead discovery techniques? How do they assist in early-stage drug discovery?	05
3	4	2	Describe pharmacophore-based screening and its advantages in identifying potential drug candidates.	05
2	3	3	Explain the principles of homology modeling and its applications in protein structure prediction.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM THEORY EXAMINATION
SESSION: 2024-25
M. PHARM.: II Semester / I Year

Roll No.:
Subject Code: MPL 204T
Subject Name: Clinical Research & Pharmacovigilance

Semester/Year: II/I
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)

[05×02= 10]

CO	KL	S. No.	Question	Marks
CO1	K1	1	ICMR	02
CO1	K1	2	ICH-GCP	02
CO1	K1	3	Schedule Y	02
CO1	K1	4	Informed Consent Process	02
CO1	K1	5	Biomedical Research	02

Section (B)

Note: Attempt any one questions out of two, each carry 10 marks (Long Type)

[1×10= 10]

CO	KL	S. No.	Question	Marks
CO1	K2	1	Explain Institutional Review Board.	10
CO1	K2	2	Explain Regulatory Perspectives of Clinical Trials.	10

Section (C)

Note: Attempt any two out of three, each carry 5 marks (Short Type)

[2×5=10]

CO	KL	S. No.	Question	Marks
CO1	K2	1	Note on Ethical Guidelines for Human Participant	05
CO1	K2	2	Note on Clinical Trials.	05
CO1	K2	3	Note on Principles of ICH-GCP guidelines	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM THEORY EXAMINATION
SESSION: 2024-25
M. PHARM. (II Semester) / (IYear)

Roll No.:
Subject Code: MPL 204T
Subject Name: Clinical Research & Pharmacovigilance

Semester/Year: II/I
Duration:1Hrs.
Maximum Marks: 30

Section (A)

Note: Attempt all questions, each carry 2 marks (Very Short)/(MCQ)/(T/F) [05×02= 10]

CO	KL	S. No.	Question	Marks
CO4	1	1	Daily Defined Dose.	02
CO3	1	2	Pre Clinical Phase.	02
CO4	1	3	ADE VS ADR.	02
CO3	1	4	Clinical Research Organization (CRO)	02
CO4	1	5	Pharmacovigilance program of India (PvPI).	02

Section (B)

Note: Attempt any one questions out of two, each carry 10 marks (Long Type) [1×10= 10]

CO	KL	S. No.	Question	Marks
CO4	2	1	Explain WHO international drug monitoring programme.	10
CO3	2	2	Write briefly on the types, detection, reporting system and management of Adverse Drug reactions.	10

Section (C)

Note: Attempt any Two out of Three, each carry 5 marks (Short Type) [2×5=10]

CO	KL	S. No.	Question	Marks
CO3	2	1	Note on roles and responsibilities of the personnel involved in clinical Trials.	05
CO3	2	2	Note on Clinical Trials.	05
CO4	2	3	Note on Pharmacovigilance.	05

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER I MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
M. PHARMACY-I Year/ II Semester

Subject Code: MPL 205P

Duration: 4 Hrs.

Subject Name: PHARMACOLOGICAL PRACTICAL – II

Max. Marks: 60

Roll No. _____

I. Synopsis (MCQ or Fill ups or One word Question Answer) [20×1 = 20marks]

- 1) What does DRC stand for in pharmacological studies?
- 2) Define an agonist in pharmacology.
- 3) Name one commonly used isolated tissue preparation for recording DRC.
- 4) What is the significance of a dose-response curve (DRC)?
- 5) What type of graph is used to plot a DRC?
- 6) Define an antagonist in pharmacology.
- 7) Differentiate between competitive and non-competitive antagonists.
- 8) What happens to the DRC of an agonist in the presence of a competitive antagonist?
- 9) Give an example of a commonly used antagonist in pharmacological studies.
- 10) What is potentiation meant in pharmacology?
- 11) What is a bioassay?
- 12) Name a biological tissue used for bioassays in pharmacology.
- 13) What is the principle of a matching bioassay?
- 14) What is the reference standard in a bioassay?
- 15) Why is a dose-response curve important in bioassay studies?
- 16) What is interpolation in the context of a bioassay?
- 17) What type of graph is used in an interpolation bioassay?
- 18) How does interpolation bioassay differ from a matching bioassay?
- 19) What is the advantage of using an interpolation bioassay?
- 20) What is “log-dose response” meant in an interpolation bioassay?

II. Experiment

30

Major Practical

(20)

To study the effects of antagonist/potentiating agents on DRC of agonist using suitable isolated tissue preparation.

Minor Practical

(10)

To determine the strength of unknown sample by matching bioassay by using suitable tissue preparation.

III. Viva-Voce

10

MOTHERHOOD UNIVERSITY, ROORKEE
EVEN SEMESTER II MID TERM PRACTICAL EXAMINATIONS
SESSION: 2024-25
M. PHARMACY-I Year/ IISemester

Subject Code: MPL 205P

Duration: 4 Hrs.

Subject Name: PHARMACOLOGICAL PRACTICAL – II

Max. Marks: 60

Roll No. _____

I. Synopsis (MCQ or Fill ups or One word Question Answer) [20×1 = 20marks]

- 1) Define Pharmacokinetics.
- 2) Define Partial Agonist.
- 3) Differentiate between Full agonist & Inverse agonist.
- 4) Define Orphan Receptors.
- 5) Define Drug Addiction.
- 6) Define Drug Abuse.
- 7) Define Antagonist.
- 8) Define Tachyphylaxis.
- 9) Define Drug Tolerance.
- 10) Define Drug Dependence.
- 11) Define Shock.
- 12) Differentiate between Graded Bioassay & Quantal Bioassay.
- 13) Differentiate between Pharmacokinetics & Pharmacodynamics.
- 14) Differentiate between Essential Hypertension & Non-Essential Hypertension.
- 15) Differentiate between Hyperglycemia & Hypoglycemia.
- 16) Differentiate between Hypertension & Hypotension.
- 17) Differentiate between Hyperthyroidism & Hypothyroidism.
- 18) Differentiate between Type-I Diabetes & Type-II Diabetes.
- 19) Differentiate between Neurogenic Diabetes & Nephrogenic Diabetes.
- 20) Differentiate between Stroke Volume & Cardiac output.

II. Experiment 30

Major Practical (20)

To determine the strength of unknown sample by interpolation bioassay by using suitable tissue preparation.

Minor Practical (10)

To determine the strength of unknown sample by bracketing bioassay by using suitable tissue preparation

III. Viva-Voce 10

Education is the most powerful weapon which you can use to change the world.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER I MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
M. PHARM. Year/Sem.

Subject Code: MRM 301

Subject Name: Research Methodology & Biostatistics

Duration: 1Hrs.

Maximum Marks: 30

Roll No. _____

Sem./Year: _____

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 What is a dropout in a clinical trial?	CO2	KO1	02
Q2 Write the applications of biostatistics in pharmacy?	CO2	KO1, KO2	02
Q3 What is regression?	CO3	KO1	02
Q4 Define null hypothesis?	CO2	KO1	02
Q5 Define, euthanasia	CO3	KO2, KO3	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Define parametric and non-parametric test with example, explain any one?	CO2	KO2	10
Q2 Explain conflicts of interest in research methodology and biostatistics?	CO3	KO2, KO3	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks												
Q1 What are the 4 main ethics in medicine?	CO3	KO1, KO2	05												
Q2 Describe in the Detail ANOVA	CO2	KO2	05												
Q3 To assess the significance of possible variation in the performance in a certain test between the schools of a city, common test was given to a no. of students from 12 th class, randomly taken the result of three schools as below. Analyze the variance of the given Data. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>3</td> <td>6</td> </tr> <tr> <td>4</td> <td>4</td> <td>6</td> </tr> <tr> <td>6</td> <td>7</td> <td>8</td> </tr> </tbody> </table>	A	B	C	2	3	6	4	4	6	6	7	8	CO2	KO2	05
A	B	C													
2	3	6													
4	4	6													
6	7	8													
Total			10												

All the Best.

MOTHERHOOD UNIVERSITY, ROORKEE
FACULTY OF PHARMACEUTICAL SCIENCES
ODD SEMESTER II MID TERM THEORY EXAMINATIONS
SESSION: 2024-25
M. PHARM. Year/Sem.

Subject Code: MRM 301

Subject Name: Research Methodology & Biostatistics

Duration: 1Hrs.

Maximum Marks: 30

Roll No. _____

Sem./Year: _____

Section A: Attempt all questions, each carry 2 marks (Very Short)

[05×02=10]

Questions	CO	KO	Marks
Q1 What is ethics committees?	CO3	KO1	02
Q2 Write the applications of biostatistics in pharmacy?	CO3	KO1, KO2	02
Q3 What is fatality?	CO3	KO1	02
Q4 Define, Helsinki.	CO5	KO1	02
Q5 Define, euthanasia	CO4	KO2, KO3	02
Total			10

Section B: Attempt any 1 questions out of 2, each carry 10 marks (Long Type)[01×10=10]

Questions	CO	KO	Marks
Q1 Describe in the detail CPCSEA Guidelines for the laboratory Animal study.	CO4	KO2	10
Q2 Describe the History, introduction, basic principles for all medical research, and additional principles for medical research combined with medical care.	CO5	KO2, KO3	10
Total			10

Section C: Attempt any 2 questions out of 3, each carry 5 marks (Short Type) [2×5=10]

Questions	CO	KO	Marks
Q1 Describe in the detail of SOPs, personnel and training, transport of lab animals.	CO4	KO1, KO2	05
Q2 Brief the location of animal facilities to laboratories, anesthesia and euthanasia.	CO4	KO2, KO3	05
Q3 Describe in the detail conflicts between autonomy and beneficence/non-maleficence.	CO3	KO2, KO3	05
Total			10

All the Best.