Code No. D-8224/PCI

FACULTY OF PHARMACY

B. Pharmacy I Semester (PCI) (Main & Backlog) Examination, May 2022

Subject: Human Anatomy and Physiology - I

Time: 3 Hours **Max. Marks: 75**

PART - A

Note: Answer all questions. (10 x 2 = 20 Marks)

1 List out the mixed cranial nerves. Mention the functions of vagus nerve.
2 Write about the functions of mitochondria with diagram.
3 Define (a) Osmosis (b) Diffusion.
4 Explain the structure and functions of cardiac muscle.
5 List out examples for pivot joint and hinge joint.
6 Write the function of Ca++ ion in muscle contraction.
7 Explain the structure location and functions of cuboidal epithelium.
8 Explain the terms (a) Tachycardia (b) Bradycardia.
9 Write the functions of WBC cells.
10 Write the functions of Skin.

PART - A

Note: Answer any two questions. (2 x 10 = 20 Marks)

11 Define cardiac cycle? Explain in detail the phases of cardiac cycle.
12 Describe the anatomy of ear with a neat labelled diagram and explain the physiology of hearing.
13 Describe the structure of skeletal muscle and explain in detail the steps involved in muscle contraction.

PART - C

Note: Answer any seven questions. (7 x 5 = 35 Marks)

14 Describe the structure of synovial joints.
15 Explain how an action potential occurs in cardiac contractile fibers.
16 Describe the gustatory pathway to the brain.
17 Describe the major responses of the body to stimulation by the sympathetic nervous system.
18 Explain in detail the structure and life cycle of RBC cells.
19 Explain anatomy of ear with a neat labelled diagram.
20 Describe the three mechanisms that contribute to hemostasis.
21 Outline the steps involved in the sliding filament mechanism of muscle contraction.
22 Describe the functions of the lymphatic system.

Code No. D-8229/PCI

FACULTY OF PHARMACY

B. Pharmacy I Semester (PCI) (Main & Backlog) Examination, May

2022 Subject: Remedial Biology

Time: 1 ½ Hours **Max. Marks: 35**

Note: Answer any one questions from PART-A. and any five questions from PART-B.

PART - A (1 x 10 = 10 Marks)

1. Describe the composition of blood and write a note on blood grouping.
2. Write about leaf modifications with examples and suitable diagrams.

PART - B (5 x 5 = 25 Marks)

3. Describe the types of recimose Inflorescence.
4. Describe the mechanism of breathing.
5. How are carbohydrates digested and absorbed?
6. Discuss the generation and conduction of nerve impulse.
7. Write the salient features of monera and fungi.
8. What is biological nitrogen fixation?
9. Define tissue and describe the types of plant tissues?

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Code No: D-8230/PCI

FACULTY OF PHARMACY

B. Pharmacy I - Semester (PCI) (Main& Backlog) Examination, May 2022

Subject: Remedial Mathematics

Time: 1 ½ Hours **Max. Marks: 35**

Note: Answer any one questions from Part -A any five questions from Part-B

PART - A (1 x 10 = 10 Marks)

1. Using Cramer's rule Solve 2x-y+3z=9, x + y + z = 6 and x – y + z= 2

2. Resolve $\frac{5x+6}{(2+x)(1-x)}$ into partial fractions.

PART - B (5 x 5 = 25 Marks)

3. Evaluate $\int_1^{} \frac{Cos\sqrt{x}}{\sqrt{x}}\, dx$.

4. Differentiate e^x tan x with respect to x

5. If $A=\begin{bmatrix} 3 & 1 \\ -1 & 2 \end{bmatrix}$ Show that A^2 -5A+7I=0

6. Prove that $2\log\frac{3}{5} + 3\log\frac{5}{7} + 2\log\frac{7}{3} = \log\frac{5}{7}$

7. Find the line passing through the point (-4, -3) and parallel to the line joining (1, -3) and (-5, 1)

8. Find the Laplace transform of $t^3 . e^{2t}$

9. Prove $\begin{vmatrix} bc & b+c & 1 \\ ca & c+a & 1 \\ ab & a+b & 1 \end{vmatrix} = (a-b), (b-c), (c-a)$

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Code No: D-8228/PCI

FACULTY OF PHARMACY

B. Pharmacy I - Semester (PCI) (Main & Backlog) Examination, May 2022

Subject: Communication Skills

Time: 1.5 Hours **Max. Marks: 35**

PART - A

Note: Answer any one question: **(1 x 10 = 10 Marks)**

1. Discuss in detail the various barriers of communication and its impact.
2. Write a paragraph of 250 words on," Impact of COVID 19 on Education system in India"

PART - B

Note: Answer any five questions: **(5 x 5 = 25 Marks)**

3. What are the ways to overcome nervousness before an interview?
4. Write about the non-verbal communication.
5. Discuss the communication process in detail.
6. Explain the various communication styles.
7. How to become an Active Listener?
8. What are the Do's and Don'ts of Group discussion?
9. Explain the techniques of delivering a presentation.

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Code No: D-8227/PCI

FACULTY OF PHARMACY

B. Pharmacy I - Semester (PCI) (Main) Examination, May 2022

Subject: Pharmaceutical Inorganic Chemistry

Time: 3 Hours **Max. Marks: 75**

PART – A

Note: Answer all the questions. **(10 x 2 = 20 Marks)**

1. Define the impurity. Give two examples.
2. Write the principle involved in Limit test for Sulphates
3. Define Lewis acid and Lewis base with examples.
4. Differentiate acidifier and antacid.
5. Define cathartics. Classify with examples.
6. Explain the mechanism involved in cyanide poisoning
7. Write the method of preparation and uses of Ferrousgluconate.
8. Define antimicrobials with examples.
9. Write the composition of ORS.
10. What are antacids mention three preparations

PART – B

Note: Answer any two questions. **(2 x 10 = 20 Marks)**

11. Explain in detail principle, procedure involved in Limit test for Arsenic with neat labelled diagram.
12. What are antimicrobials? Classify, explain the chemical properties of H_2O_2.
13. Write a note on a) Methods to adjust isotonicity
    b) Buffer capacity and buffer equation

PART – B

Note: Answer any seven questions. **(7 x 5 = 35 Marks)**

14. Define Limit test. Write the principle and procedure involved in limit test for heavy metals.
15. What are Haematinics? Write the preparation, assay and uses of $FeSO_4$.
16. Discuss Labelling, Handling and storage of radio pharmaceuticals.
17. Write about electrolyte combination therapy.
18. Discuss about physiological acid-base balance.
19. Define antidotes Classify; write the method of preparation, and assay of any one antidote.
20. Mention the method of preparation, assay of boric acid, Potassium permanganate.
21. Write the preparation, assay and uses of $CuSO_4$.
22. Write about the storage conditions, precautions and applications of radio pharmaceuticals

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Code No: D-8226/PCI

FACULTY OF PHARMACY

B. Pharmacy I - Semester (PCI) (Main & Backlog) Examination, May 2022 Subject: Pharmaceutics - I

Time: 3 Hours **Max.Marks:75**

PART – A

Note: Answer all the questions. **(10 X 2 = 20 Marks)**

1. Explain career opportunities for pharmacists.
2. Briefly explain the principle involved in the preparation of Eutectic mixture.
3. How do you prepare 600ml of 60% alcohol using 90% alcohol by using allegation method.
4. Define and classify powders with examples.
5. Differentiate between syrups and elixirs.
6. Differentiate between flocculated and deflocculated suspension.
7. Define therapeutic incompatibility. Explain the terms potentiation and synergism.
8. Write the preparation of cold cream.
9. Explain various bases for the preparation of gels.
10. Explain the principle involved in the preparation of calamine lotion?

PART – B

Note: Answer any two questions. **(2 X 10 = 20 Marks)**

11. Define & classify suspensions. Explain the preparation and stabilization of suspension.
12. Explain the methods of preparation of ointments.
13. Define and classify in compatibility. Explain chemical incompatibility with examples.

PART – C

Note: Answer any seven questions. **(7 X 5 = 35 Marks)**

14. What are the salient features of I.P
15. Define prescription. Explain various parts of prescription.
16. Explain various methods to adjust isotonicity. How do you prepare isotonic D-glucose solution using molecular weight method (Molecular weight of D-glucose=180).
17. Briefly explain excipients used in liquid dosage forms.
18. Explain the preparation of Enemas
19. Differentiate between
    a) Gargle and mouthwash b) Lotions and liniments
20. Explain the preparation of vanishing cream.
21. Write the preparation of Nasal drops.
22. How do you prepare 6 suppositories of 1 gm capacity? Each contain 300mg of bismuth subgallate (Displacement value of bismuth subgallate=3)

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Code No: D-8225/PCI

FACULTY OF PHARMACY

B. Pharmacy I-Semester (PCI) (Main & Backlog) Examination, May 2022

Subject: Pharmaceutical Analysis

Time: 3 Hours **Max.Marks:75**

Note: Answer All Questions from Part –A, Any two Questions from Part-B. And any seven Questions from Part-C

PART – A (10 X 2 = 20 Marks)

1. Define volumetric analysis and list out the types of Volumetric analysis.
2. Define accuracy and precision.
3. Write different types of errors.
4. Define primary standard with example.
5. Write the different sources of impurities.
6. List out the indicators used in acid base titrations.
7. Explain Co-precipitation.
8. List out the types of redox titrations.
9. Mention different electrodes used in potentiometry.
10. What are metal indicators?

PART – B (2 X 10 = 20 Marks)

11. Explain the classification of acid base titrations and the theory involved in titration of strong acid against strong base using suitable example.
12. Explain the principle and theory involved in complex metric titration with an example.
13. What is potentiomery? Explain construction and working of electrochemical cell? Mention the applications of potentiometry?

PART – C (7 X 5 = 35 Marks)

14. Discuss the applications of Non-Aqueous titrations?
15. Define limit test. Explain the limit test for heavy metals (Arsenic or Lead).
16. What is conductance? Write about conductivity cell with a neat labeled diagram.
17. Write a short note on types of Complexometric titrations
18. Write the Principle and applications of diazotization titrations?
19. Write the principle involved in potentiometic titrations and give advantages over indicator method?
20. Write the preparation and standardization of 0.5N NaOH and 0.1N HCl
21. Write the principle and applications of Iodometry
22. Write about electrodes used in polarography

Code No. D-8152/PCI

FACULTY OF PHARMACY

B. Pharmacy (PCI) I Semester (Backlog) Examination, March 2022

Subject: Pharmaceutical Analysis

Time: 3 Hours **Max. Marks: 75**

Note: Answer all questions from Part-A. Any Two questions from Part-B and any Seven questions from Part-C.

PART - A (10 x 2 = 20 Marks)

1. Define and Differentiate volumetry and Gravimetry
2. Define limit test and write its significance
3. Mention the primary standards used in Acidimetry and complexometry
4. Write the advantages of Gravimetric Analysis
5. Write the applications of potentiometry
6. Write about indicators used in Non aqueous titrations
7. Discuss the methods to minimize errors in Pharmaceutical Analysis
8. How do you standardize 1N NaOH solution?
9. Write the uses of complexometric titrations
10. Define Buffers and give examples

PART - B (2 x 10 = 20 Marks)

11. Explain the sources of impurities in medicinal agents. Write the limit test for (i) Sulphates (ii) Chlorides
12. Explain the theory involved in the acid base titrations and discuss the neutralization curve for the titration of strong acid and strong base.
13. Write the Principle, method and applications of Counductometry.

PART - C (7 x 5 = 35 Marks)

14. Discuss the theories of pH? Indicators.
15. What is Pharmacopoeia? Discuss about the importance of Pharmacopoeia Monographs
16. Explain the Preparation and standardization of EDTA solution.
17. Write the construction and working of standard hydrogen electrode.
18. Write the properties of primary standards and secondary standards with examples.
19. Explain the Digestion and Co-Precipitation in gravimetric analysis
20. Write the preparation and standardization of 1M $KMnO_4$ and 1N NaOH
21. Write the principle and applications of Polarography
22. Explain the principle involved in the Neutralization titrations using Potentiometry.

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Code No: D-8155/PCI

FACULTY OF PHARMACY

B. Pharmacy I - Semester (PCI) (Backlog) Examination, March / April 2022

Subject: Remedial Biology

Time: 1 1/2 Hours **Max. Marks: 35**

Note: Answer one questions from Part -A any five questions from Part-B PART - A (1 x 10 = 10 Marks)

1. a) Write in detail about the composition and functions of blood.
   b) Describe the mechanism of breathing and its regulation
2. Write briefly about stem modifications with suitable diagrams.

PART - B (5 x 5 = 25 Marks)

3. Write a detail note on binomial nomenclature.
4. What are the steps involved in coagulation of blood.
5. Write about cell division.
6. Write down the classification of Tissues.
7. Draw the internal structure of heart and label the parts.
8. Write any six differences between prokaryotes and eukaryotes.
9. Write a brief note on Photosynthesis. What are the factors effecting photosynthesis?

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Code No: D-8156/PCI

FACULTY OF PHARMACY

B. Pharmacy I – Semester (PCI) (Backlog) Examination, April 2022

Subject: Remedial Mathematics

Time: $1^{1/2}$ Hours **Max. Marks: 35**

Note: Answer one questions from part – A and any five questions from part – B

PART – A (1 x 10 = 10 Marks)

1. Solve $2x - y + 3Z = 9, x + y + z = 6$ and $x + y + z = 2$ using matrix inversion method.

2. Resolve $\frac{5x + 6}{(2 + x)(1 - x)}$ into partial fractions.

PART – B (5 x 5 = 25 Marks)

3. If $\frac{\log_2 a}{4} = \frac{\log_2 b}{6} = \frac{\log_2 c}{3p}$ and $a^3 b^2 c = 1$ find the value of p.

4. Find the slopes of the lines a) parallel to and b) perpendicular to the line passing through (6,3) and (-4,5).

5. Find the derivative of $x^{32} + \sin x + \log x$.

6. Evaluate $\int \frac{2x + 1}{x^2 + x + 1} dx$.

7. Find the Laplace transform of $3' + 6e_{2t}$.

8. If $A = \begin{bmatrix} 2 & 3 \\ -1 & 2 \end{bmatrix}$ show that $A^2 - 4A + 7I = 0$.

9. Evaluate $\lim_{x \to 5} \frac{x^2 - 25}{x - 5}$.

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Code No: D-8151/PCI

FACULTY OF PHARMACY

B. Pharmacy I-Semester (PCI) (Backlog) Examination, March 2022 Subject:

Human anatomy and Physiology - I

Time: 3 Hours **Max.Marks:75**

Note: Answer All Questions from Part -A, Any two Questions from Part-B. and Any seven Questions from Part-C

PART – A (10 X 2 = 20 Marks)

1. List different taste buds and write their functions?
2. Name the valves of heart and write their location in heart?
3. Define a) Homeostasis b) Hemopoiesis
4. Draw a neat labelled diagram of transitional epithelial tissue and write its functions?
5. List out the bones in lower limb?
6. Write the functions of WBC cells?
7. Explain a) Passive diffusion b) facilitated diffusion
8. Explain the terms a) Angina pectoris b) Atherosclerosis
9. Write the functions of thymus gland?
10. Explain gliding joint with examples?

PART – B (2 X 10 = 20 Marks)

11. Define cardiac cycle? Explain in detail the phases of cardiac cycle?
12. Draw a neat labelled diagram of ear? Explain the physiology of hearing?
13. Define tissues and explain in detail about types of epithelial tissues?

PART – C (7 X 5 = 35 Marks)

14. Describe the structure of Eye with a neat labelled diagram?
15. Add a note on physiology of muscle contraction?
16. Write the composition and functions of blood?
17. Classify different types of muscular tissues and write their functions?
18. Write the differences between sympathetic and parasympathetic nervous system?
19. Explain the structure and functions of following bones
    a) Sternum b) Atlas
20. Define cell signalling and explain intracellular signalling pathway?
21. Draw a neat labelled diagram of skin and write its functions?
22. Describe the structure of synovial jontandadd a note on types of synovial joint?

Code No: D-8153/A/PCI

FACULTY OF PHARMACY

B. Pharmacy I – Semester (PCI) (Backlog) Examination, March 2022 Subject: Pharmaceutical Inorganic Chemistry

Time: 3 Hours **Max.Marks:75**

Note: Answer all Questions from Part -A, Any two Questions from Part-B. and Any seven Questions from Part-C

PART – A (2x10 = 20 Marks)

1. Write the principle involved in limit test for Iron.
2. Define official substance and official preparation.
3. Define buffers and give examples of buffers in pharmaceutical systems.
4. Write the composition and applications of ORS.
5. What are desensitizing agents and give examples.
6. Mention official preparations of Iodine with their composition and applications.
7. Define emetics and expectorants and give two examples of each.
8. Write the preparation uses of ferrous gluconate.
9. What are antacids? Write the ideal properties.
10. Define radiopharmaceuticals and write the properties of β- radiations.

PART – B (2x10= 20 Marks)

11. Explain principle and procedure involved in limit test for Arsenic with a neat labelled diagram.
12 Define antimicrobials. Write the preparation, assay and uses of
    a) Hydrogen peroxide b) Ammonium Chloride c) Chlorinated lime
13. a) What are anticaries agents? Explain the role of fluorides in preventing dental caries.
    b) Write the preparation, assay and uses of Calcium gluconate.

PART – C (5 x 7 = 35Marks)

14. Explain the principle and procedure involved in modified limit test for chlorides.
15. Give the method of preparation, assay and uses of Copper sulphate and Ferrous sulphate.
16. Discuss the detail about sources of impurities.
17. What are antidotes? Write the preparation, assay and uses of Sodium thiosulphate.
18. Write a note on cathartics.
19. Explain any two methods to measure radioactivity.
20. Write the preparation and uses of Magnesium sulphate, Bentonite and Zinc sulphate.
21. Discuss labelling, handling and storage of radiopharmaceuticals.
22. Discuss in detail about physiological acid base balance.

Code No: D-8153/PCI

FACULTY OF PHARMACY

B. Pharmacy I – Semester (PCI) (Backlog) Examination, March 2022

Subject: Pharmaceutics

Time: 3 Hours **Max.Marks:75**

Note: Answer all Questions from Part -A, Any two Questions from Part-B. and Any seven Questions from Part-C

PART – A (10 x 2 = 20 Marks)

1. Classify dosage forms.
2. Define inhalations.
3. If adult dose of Paracetamol is 500mg. What is the dose for a child of five years old?
4. Define eutectic mixtures with an example.
5. Differentiate syrups and elixirs with examples.
6. Write stokes law equation.
7. Give an example for therapeutic incompatibility and how to overcome it.
8. Give any two advantages and disadvantages of suppositories.
9. Describe any one factor influencing dermal penetration of drugs.
10. Write the formula for simple ointment.

PART – B (2 x 10 = 20 Marks)

11. Define suspensions. Write a note on preparation of suspensions.
12. Write a note on factors affecting posology.
13. Describe methods to overcome physical and chemical incompatibility with examples.

PART – C (7 x 5 = 35 Marks)

14. Write a brief note on history of pharmacy.
15. Write a note on errors in prescription.
16. Discuss about methods to adjust isotonicity.
17. Write a note on dusting powders. Give two official preparations.
18. Prepare 500ml of 70% v/v alcohol from 95% v/v alcohol and 20% v/v alcohol.
19. Differentiate lotions and liniments.
20. Explain different methods of preparation of emulsions.
21. Explain displacement value calculation with example.
22. Describe the different methods for preparation of ointments.

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Code No: D8077/PCI

FACULTY OF PHARMACY

B. Pharmacy I – Semester (PCI) (Suppl.) Examination, December 2021

Subject: Pharmaceutics

Time: 2 Hours **Max.Marks:75**

Note: Answer Any Seven Questions from Part -A, Any One Questions from Part-B. and Any Five Questions from Part-C

PART – A (7 X 3 = 21 Marks)

1. Classify dosage forms.
2. Define inhalations.
3. If adult dose of Paracetamol is 500mg. What is the dose for a child of five years old?
4. Define eutectic mixtures with an example.
5. Differentiate syrups and elixirs with examples.
6. Write stokes law equation.
7. Give an example for therapeutic incompatibility and how to overcome it.
8. Give any two advantages and disadvantages of suppositories.
9. Describe any one factor influencing dermal penetration of drugs.
10. Write the formula for simple ointment.

PART – B (1X 14= 14 Marks)

11. Define suspensions. Write a note on preparation of suspensions.
12. Write a note on factors affecting posology.
13. Describe methods to overcome physical and chemical incompatibility with examples.

PART – C (5 X 8 = 40Marks)

14. Write a brief note on history of pharmacy.
15. Write a note on errors in prescription.
16. Discuss about methods to adjust isotonicity.
17. Write a note on dusting powders. Give two official preparations.
18. Prepare 500ml of 70% v/v alcohol from 95% v/v alcohol and 20% v/v alcohol.
19. Differentiate lotions and liniments.
20. Explain different methods of preparation of emulsions.
21. Explain displacement value calculation with example.
22. Describe the different methods for preparation of ointments.

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Code No. D8075/PCI

FACULTY OF PHARMACY

B. Pharmacy I Semester (PCI) (Supply) Examination, December 2021

Subject: Human Anatomy and Physiology - I

Time: 2 Hours **Max. Marks: 75**

PART - A

Note: Answer any seven questions. **(7 x 3 = 21 Marks)**

1 What are the four basic types of human tissues?
2 Add a note on skeletal muscle.
3 Define (a) Stroke volume (b) Cardiac output.
4 Explain the terms (a) Myocardial infarction (b) Hypertension.
5 Mention the composition of lymph.
6 Write the functions of sternum.
7 Explain neuromuscular junction.
8 Explain the structure location and functions of ciliated columnar epithelium.
9 Write the structure and functions of endoplasmic reticulum.
10 Write the composition of blood.

PART - A

Note: Answer any one questions. **(1 x 14 = 14 Marks)**

11 Define cardiac cycle. Explain in detail the phases of cardiac cycle.
12 Describe the anatomy of eye with a neat labelled diagram. Add a note on visual pathway.
13 Define clot. Explain various pathways in the process of blood clotting.

PART - C

Note: Answer any five questions. **(5 x 8 = 40 Marks)**

14 Describe the structure of synovial joints.
15 Explain how an action potential occurs in cardiac contractile fibres.
16 Describe the gustatory pathway to the brain.
17 Describe the major responses of the body to stimulation by the sympathetic nervous system.
18 Explain in detail the structure and life cycle of RBC cells.
19 Explain anatomy of ear with a neat labelled diagram.
20 Describe the three mechanisms that contribute to hemostasis.
21 Outline the steps involved in the sliding filament mechanism of muscle contraction.
22 Describe the functions of the lymphatic system.

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Code No. D8080/PCI

FACULTY OF PHARMACY

B. Pharmacy I Semester (PCI) (Suppl.) Examination, December 2021

Subject: Remedial Biology

Time: 1 ½ Hours **Max. Marks: 35**

Note: Answer any one questions from Part-A. and any five questions from part-B.

PART - A (1 x 10 = 10 Marks)

1. Describe the structure of human excretory system and urine formation.
2. Describe the mechanism of Photosynthesis.

PART - B (5 x 5 = 25 Marks)

3. Describe the anatomical structure of dicot stem.
4. Describe the mechanism of breathing.
5. How are fats digested and absorbed?
6. Discuss the generation and conduction of nerve impulse.
7. Write about the plant growth regulators?
8. Explain the somatic cell division in plants?
9. Write about the functions of hormones secreted by pituitary gland.

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Code No: D8081/PCI

FACULTY OF PHARMACY

B. Pharmacy I – Semester (PCI) (Suppl.) Examination, December 2021

Subject: Remedial Mathematics

Time: 1 ½ Hours **Max. Marks: 35**

Note: Answer one questions from part – A and any five questions from part - B

PART – A (1 X 10 = 10 Marks)

1. Solve $2x - y + 3Z = 9, x + y + z = 6$ and $x + y + z = 2$ using Cramer's Rule
2. Resolve into partial fractions $\frac{2x + 6}{(2x + 3)(x - 1)}$.

PART – B (5 X 5 = 25 Marks)

3. If $x = 1+\log_a bc, y = 1+\log_b ca, z = 1+\log_c$ prove that xyz = xy + yz + ex
4. Find the slopes of straight lines cutting of intercepts a, b on the coordinate axes such that a + B = 5, ab = 6.
5. Find the derivative of $\frac{e^{\sin x}}{\cos x}$
6. Evaluate $\int \sin (3 - 4x) dx$.
7. Find the Laplace transform of $7t^3 - 2\cos t$.
8. If $A = \begin{bmatrix} 2 & 3 \\ -1 & 2 \end{bmatrix}$ show that $A^2 - 4A + 7I = 0$.
9. Evaluate $\lim_{x \to 3} \frac{x^2 - 9}{x - 3}$.

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Code No. D8079/PCI

FACULTY OF PHARMACY

B. Pharmacy I Semester (PCI) (Suppl.) Examination, December 2021 Subject:

Communication Skills

Time: 1½ Hours **Max. Marks: 35**

Note: Answer any one questions from Part-A. and any five questions from part-B.

PART - A (1 x 10 = 10 Marks)

1. What is the purpose of an interview? What are the do's and don'ts of an interview?
2. Discuss in detail the various barriers of communication and its impact.

PART - B (5 x 5 = 25 Marks)

3. Write about dealing with fears and planning your Presentation?
4. Write about the Communication process.
5. How are the Visual perception and Language affecting our communication perspective?
6. How to become an Active listener?
7. What is the role of Body Language in Communication?
8. Draft a job application letter for the post of marketing executive in a reputed pharmaceutical company.
9. What are the do's and don'ts of group Discussion?

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Code No: D8078/PCI

FACULTY OF PHARMACY

B. Pharmacy I – Semester (PCI) (Suppl.) Examination, December 2021 Subject: Pharmaceutical Inorganic Chemistry

Time: 2 Hours **Max.Marks:75**

Note: Answer Any Seven Questions from Part -A, Any One Questions from Part-B. and Any Five Questions from Part-C

PART – A (7 X 3 = 21 Marks)

1. Write the principle involved in limit test for Lead.
2. Define impurities and mention any four sources of impurities.
3. Define buffer equation and and buffer capacity.
4. Define electrolyte replacement therapy and give examples.
5. What are dentifrices? Give the composition of Zinc – Eugenol cement.
6. Define acidifiers and write examples.
7. Write the uses of Sodium ortho phosphate and potassium permanganate.
8. Define antidotes and mention the antidotes used in cyanide poisoning.
9. What is radioactivity and explain units of radioactivity.
10. Define astringents and give examples.

PART – B (1X 14 = 14 Marks)

11. Explain principle and procedure involved in limit test for Iron and Chlorides.
12 Define isotonic solution. Explain in detail the methods of adjusting isotonicity.
13. a) Classify antimicrobial agents with examples.
    b) Write the preparation, properties, assay and uses of Hydrogen peroxide.

PART – C (5 X 8 = 40Marks)

14. Write briefly about history of pharmacopeia.
15. What are electrolyte replenishers? Write the preparation, assay and uses of a Sodium Chloride.
16. Discuss in detail about desensitizing agents.
17. What are antacids? Write the preparation, properties and uses of Sodium bicarbonate, Aluminium hydroxide gel.
18. Write in detail about the mechanism of antimicrobial agents.
19. Explain physiological role of Sodium and Calcium.
20. Write the preparation, properties and uses of Potassium iodide, Sodium nitrite and Potash alum.
21. Define haematinics and write the preparation, assay and uses of Ferrous sulphate.
22. Give the various applications of radioactive substances.

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Code No. D8076/PCI

FACULTY OF PHARMACY

B. Pharmacy (PCI) I Semester (Suppl.) Examination, December 2021 Subject:

Pharmaceutical Analysis

Time: 2 Hours **Max. Marks: 75**

Note: Answer any seven questions from Part-A. Any One question from Part-B and any five questions from Part-C.

PART - A (7 x 3 = 21 Marks)

1. Enlist the source of errors that occur during Pharmaceutical Analysis.
2. What are secondary standards? Write the Preparation of any two secondary standard solution.
3. Write about the source of impurities in medicinal agents.
4. Give the examples for compounds estimated by Acidimetry
5. Differentiate molarity and Normality
6. Write the uses of Volhards methods
7. What are metal indicators and give examples?
8. Define Co-Precipitation
9. Enlist the solvents used in nonaqueos titration
10. Differentiate iodometry and Iodimetry

PART - B (1 x 14 =14 Marks)

11. Discuss the principle and applications of ceremetry and dichrometry
12. Write the Principle, methods and applications of Diazotization titrations
13. Discuss the theory of complexometric titrations and write about estimation of Magnesium sulphate.

PART - C (5 x 8 = 40 Marks)

14. Write the theories of Acid Base indicators
15. Define limit test and explain the limit test for chlorides and sulphates
16. Explain the steps involved in the gravimetric analysis
17. What is Reference electrode? Write the construction and working of any one reference electrode
18. What is polarography? Write the construction and working of dropping mercury Electrode.
19. Explain the principle and applications of precipitation titrations with example
20. Write the preparation and standardization of 1 M KMnO4 and 1N NaOH
21. Write the principle involved in the potentiometric titration of Strong acid vs Strong base
22. Write a note on redox indicators with examples.

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Code No: 12051/PCI

FACULTY OF PHARMACY

B.Pharmacy I-Semester (PCI) (Main & Backlog) Examination, July 2021

Subject: Human anatomy and Physiology-I

Time: 2 Hours **Max.Marks:75**

Note: Answer Any Seven Questions from Part -A, Any One Questions from Part-B. and Any Five Questions from Part-C

PART – A (7 X 3 = 21 Marks)

1. Define ganglion and write its function?
2. Explain the terms a) Active transport b) Passive transport?
3. Describe the structure and functions of Cardiac muscle?
4. Explain the terms a) Myocardial infarction b) Hypertension?
5. What is neuromuscular junction? And its role
6. Define a) Stroke volume b) Cardiac output?
7. Explain hinge joint with example?
8. Explain different types of cartilage tissues?
9. Write the functions of ribosomes?
10. Write the functions of thymus gland?

PART – B (1X 14= 14 Marks)

11. Describe the structure of eye and explain the physiology of vision?
12. Define blood pressure and explain its regulation mechanism?
13. a) Describe the organization of skeletal muscles?

    b) Explain the physiology of muscle contraction?

PART – C (5 X 8 = 40Marks)

14. Describe the structure of ear with a neat labelled diagram?
15. Explain the structure and functions of following bones

    a) Scapula b) Femur
16. List out cranial nerves and write their functions?
17. Describe the structure of synovial joint and add a note on types of synovial joint?
18. Explain the events of cardiac cycle?
19. Describe the structure and functions of nervous tissue?
20. Write a note on lymphatic circulation?
21. Explain the physiology of olfaction?
22. Describe the structure and functions of platelets?

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Code No: 12054/PCI

FACULTY OF PHARMACY

B. Pharmacy I-Semester (PCI) (Main & Backlog) Examination, August 2021

Subject: Communication Skills

Time: – Hours **Max. Marks: 35**

Note: Answer Any One Question from Part - A and Any Five Questions from Part - B.

PART – A (1x10 = 10 marks)

1 Explain various elements of Communication.

2 Write a paragraph of 250 words on " Online Education system in India "

PART- B (5 x 5 = 25 marks)

3 What is the importance of Communication skills?

4 How to plan a Presentation?

5 What is the impact of visual and language perspective in Communication?

6 How to become an active listener?

7 Write about the Barriers of Communication.

8 What are the Do's and Don'ts of Group discussion?

9 Write about the purpose of an Interview.

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Code No: 12055/PCI

FACULTY OF PHARMACY

B.Pharmacy I-Semester (PCI) (Main & Backlog) Examination, August 2021 Subject : Remedial Biology

Time: $1^{1/2}$ Hours **Max. Marks: 35**

Note: Answer one questions from Part -A and any five questions from Part-B

PART A (1X10 = 10 Marks)

Answer any **one** of the following questions

1. a) What are the functions of hormones secreted by anterior lobe of pituitary gland.
   b) Write a short note on blood groups.
2. Write briefly about root modifications with suitable diagrams.

PART- B (5 X5 = 25 Marks)

3. Describe the anatomy of Dicot stem.
4. Describe the structure of Nephron and write about urine formation.
5. Write about the mitotic cell division in plants.
6. Describe the nitrogen cycle and biologic nitrogen fixation
7. Explain the role of digestive enzymes.
8. Explain the generation and conduction of nerve impulse.
9. Explain the phases of plant growth. Add a note on plant growth regulators.

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Code No: 12056/PCI

FACULTY OF PHARMACY

B.Pharmacy I-Semester (PCI) (Main & Backlog) Examination, August 2021 Subject : Remedial Mathematics

Time: $1^{1/2}$ Hours **Max. Marks: 35**

Note: Answer one questions from Part -A and any five questions from Part-B

PART- A (1X10 = 10 Marks)

Answer any **one** of the following questions

1. Solve the equations 3x+4y+5z = 18, 2x-y+8z=13 and 5x - 2y + 7z = 20 by matrix inversion method
2. Resolve into partial fractions $\frac{1}{(1-2x)(1+3x)}$

PART- B (5 X5 = 25 Marks)

3. Show that $\begin{vmatrix} 1 & a & a^2 \\ 1 & b & b^2 \\ 1 & c & c^2 \end{vmatrix}$ = (a-b) (b-c) (c-a)
4. Prove that $\frac{1}{x} - \frac{1}{y} = \frac{1}{3}$ if $(2.3)^x = (0.23)^y = 1000$
5. Differentiate $\sqrt{Sin\ x}$ with respect to x
6. Find the laplace transform of $t^3.e^{2t}$
7. Show that the line through (2, -5) and (-2, 5) is perpendicular to the line through (6,3) and (1,1).

   Evaluate $\int \frac{3x+7}{3}\,dx$

8. $x^2 + 14x - 5$

$A = \begin{bmatrix} -2 & 1 & 0 \\ 3 & 4 & -5 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 2 \\ 4 & 3 \\ -1 & 5 \end{bmatrix}$

9. If then find A+B'

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Code No: 12053/A/PCI

FACULTY OF PHARMACY

B.Pharmacy I-Semester (PCI) (Main & Backlog) Examination, July 2021

Subject : Pharmaceutics

Time: 2 Hours **Max.Marks:75**

Note: Answer Any Seven Questions from Part - A, Any One Questions from Part-B. and Any Five Questions from Part-C

PART – A (7 X 3 = 21 Marks)

1 Briefly explain the importance of Isotonicity.

2 What are organoleptic additives

3 Explain the term. Proof spirit and write the formulae for conversion of percentages solution to proof spirit as per IP.

4 Explain the preparations of any one effervescent powder.

5 Differentiate between lotions and liniments.

6 Differentiate between flocculates and deflocculated suspensions.

7 Explain advantages and disadvantages of suppositories.

8 Define physical incompatibility: How do you dispense a preparation with two immiscible liquids.

9 Define pastes. Write the preparation of lassar's paste.

10 Define and explain the importance of displacement value

PART – B (1 X 14 = 14 Marks)

11 Explain the methods of preparation of emulsion. Add a note on stability of emulsions.

12 Explain the methods of preparation of suppositories.

13 Explain about various ointment bases..

PART – C (5 X 8 = 40 Marks)

14 Define prescription. Explain various parts of prescription.

15 What are throat paints. Explain the preparation of Mandl's paints.

16 What are the salient features of Indian pharmacopoeia

17 Define posology. Enlist various formula to calculate paediatric doses. Adult dose of a drug is 500mg. Calculate the dose for 5 years child.

18 Briefly explain various solubility enhancement techniques

19 Explain the preparation of simple syrup as per IP.

20 Explain the tests for identification of type of emulsions

21 Explain therapeutic incompatibility

22 Explain the preparation of vanishing cream.

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Code No: 12052/PCI

FACULTY OF PHARMACY

B.Pharmacy I-Semester (PCI) (Main & Backlog) Examination, July 2021

Subject : Pharmaceutical Analysis

Time: 2 Hours **Max.Marks:75**

Note: Answer Any Seven Questions from Part -A, Any One Question from Part-B. and Any Five Questions from Part-C

PART – A (7 X 3 = 21 Marks)

1. Define accuracy and precision
2. Write different types of errors
3. Define primary standard and secondary standards with examples?
4. What is Pharmacopoeia? Mention different pharmacopeias
5. Give examples for the compounds estimated by complexometry
6. Differentiate end point and equivalence point
7. Differentiate oxidizing agent and reducing agent with examples?
8. Differentiate conductometry and potentiometry
9. Define Digestion and Nucleation in gravimetric analysis?
10. Write the applications of polarography.

PART – B (1 X 14 = 14 Marks)

11. Write the theories of acid-base indicators.
12. Explain gravimetric analysis technique detail
13. Write about different types of conductometric titrations

PART – C (5 X 8 = 40 Marks)

14. Discuss the applications of Non-Aqueous titrations?
15. Define limit test. Explain the limit test for heavy metals (Arsenic or Lead).
16. What is conductance? Write about conductivity cell with a neat labeled diagram.
17. Write a short note on types of Complexometric titrations
18. Write the Principle and applications of diazotization titrations?
19. Write the principle involved in potentiometic titrations and give advantages over indicator method?
20. Write the preparation and standardization of 0.5N NaOH and 0.1N HCl
21. Write the principle and applications of Iodometry
22. Write about electrodes used in polarography

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Code No: 12053/PCI

FACULTY OF PHARMACY

B.Pharmacy I-Semester (PCI) (Main & Backlog) Examination, August 2021

Subject: Pharmaceutical Inorganic Chemistry

Time: 2 Hours **Max.Marks:75**

Note: Answer Any Seven Questions from Part - A, Any One Questions from Part-B. And Any Five Questions from Part-C

PART – A (7 X 3 = 21 Marks)

1. Define the limit test and write the principle involved in limit test for Chlorides.
2. Define Official substance and Official preparation.
3. Define Antacids. Enlist it's ideal properties.
4. Write about Oral Rehydration Salts.
5. Define Buffers. Write the Bufferequation.
6. List out the methods to adjust isotonicity of solution.
7. Define Dentrifices. Give two examples.
8. Define expectorants and emetics with two examples each.
9. Define Radio isotopes. What is Radio activity.
10. Write the composition of Ringer's injection.

PART – B (1 X 14 = 14 Marks)

11. Define impurity. Explain in detail about how impurities will enter into the finished pharmaceutical substance.

12. a) What are antimicrobials. Classify them.
    b) Write the method of preparation, assay and uses of any one antimicrobial agent.

13. Give a note on Dental Products.

PART – C (5 X 8 = 40 Marks)

14. Write the method of preparation, assay and uses of $CuSO_4$.
15. Write in detail about Mechanism of Action of antimicrobials.
16. Explain the principle, procedure involved in limit test for Iron.
17. Write a note on role of fluorides in the treatment of dental caries. Write a note on NaF.
18. Define Haematinics. Explain the preparation, assay and uses of Ferrousgluconate.
19. Write in detail about Electrolyte combination therapy.
20. Write the preparation and assay of NaCl
21. Write the preparation, assay of a) NH_4Cl b) $NaHCO_3$
22. Write a note on clinical applications of Radiopharmaceuticals.

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