QP Code: 121006 **Reg. No…….**

First Semester B. Pharm Degree Regular/Supplementary Examinations June 2023
Human Anatomy and Physiology
(2017 Scheme)

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

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw table/diagrams/flow charts wherever necessary***

Essay **(2x10=20)**

1. Describe the interior structure of heart with its conducting system.
2. Draw a neat labelled diagram of eye and explain the physiology of vision.

Short Notes **(7x5=35)**

3. Discuss the structure of cell with its characteristic feature.
4. The nervous tissue.
5. Explain the fibrous and cartilaginous joint.
6. Discuss the blood groups with Rh factor.
7. The composition, formation and function of lymph.
8. Discuss the effect of stimulation of parasympathetic nerves on various organs in ANS.
9. Explain the bones of the skull.

Answer Briefly **(10x2=20)**

10. Radial pulse.
11. Angina pectoris.
12. List out the cranial nerves.
13. Functions of skin.
14. Composition of tissue fluids.
15. Structure of voluntary muscle.
16. Passive transport in cell membrane.
17. Composition of plasma.
18. Sarcomere.
19. Ball and socket joint.

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QP Code: 122006 **Reg. No……**

First Semester B. Pharm Degree Regular/Supplementary Examinations June 2023
Pharmaceutical Analysis - I
(2017 Scheme)

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

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw table/diagrams/flow charts wherever necessary***

Essay **(2x10=20)**

1. What are errors in pharmaceutical analysis. Write their types. How can they be minimized.
2. Write principle involved in working of hydrogen ion responsive indicator electrode. How are end points determined in potentiometric titrations.

Short Notes **(7x5=35)**

3. Explain the principle involved in determination of calcium gluconate.
4. Write method of preparation and standardization of 0.1M potassium permanganate.
5. Explain types of neutralization curves with appropriate examples.
6. What is Ilkovic equation. Explain the differences between migration current and diffusion current.'
7. Explain advantages of non-aqueous titration. Explain the principle involved in non-aqueous titration of sodium benzoate.
8. Describe briefly theory of metal-ion indicators with suitable example.
9. Write steps involved in gravimetric estimation of barium sulphate.

Answer Briefly **(10x2=20)**

10. Write primary standards used in standardization of
    - Ceric ammonium sulphate • NaOH
11. Distinguish between precision and accuracy.
12. Define molarity.
13. Explain aprotic solvent. Give examples.
14. Write Nernst equation and explain the terms involved in it.
15. Explain co-precipitation.
16. Explain conductivity cell.
17. Example for diazotization titration.
18. Difference between iodometry and iodimetry.
19. Explain modified volhard's method.

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QP Code: 123006 **Reg. No…….**

First Semester B. Pharm Degree Regular/Supplementary Examinations June 2023
Pharmaceutics- I
(2017 Scheme)

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

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw table/diagrams/flow charts wherever necessary***

Essay **(2x10=20)**

1. Define and classify the pharmaceutical incompatibilities. Explain different physical incompatibilities with suitable examples and their rectification.
2. Define suppositories. What are its merits and demerits. Discuss the methods preparation, packing and evaluation of suppositories.

Short Notes **(7x5=35)**

3. Evaluation of semi solid dosage forms.
4. Classification of monophasic liquids with suitable examples.
5. Show the calculation to prepare 10 powders each contains 0.1mg hyoscine HBr. Minimum weight of each powder is 100mg.
6. Show the calculation to prepare and send 100 ml of Potassium permanganate solution so that when one tea spoonful is diluted 1000ml makes 1 in 5000 solution.
7. Stability problems of suspensions and its correction.
8. Methods for enhancement of solubility.
9. Parts of prescription.

Answer Briefly **(10x2=20)**

10. Write the mechanism involved to prepare the Aqueous Iodine solution.
11. Stoke's law Equation.
12. Displacement value.
13. Any two equations for calculating paediatric doses.
14. Proof spirit.
15. Difference between ointments and pastes.
16. Differentiate between lotion and liniment.
17. Effervescent granules.
18. Cosolvency.
19. Translate the Latin terms in to English.
    • mitte • infricandus • charta • collunarium

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QP Code: 124006 **Reg. No…….**

First Semester B. Pharm Degree Regular/Supplementary Examinations June 2023

Pharmaceutical Inorganic Chemistry

(2017 Scheme)

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

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw table/diagrams/flow charts wherever necessary***

Essay **(2x10=20)**

1. Describe the method of preparation, properties and assay of sodium thiosulphate.
2. Explain the principle involved in the limit tests of Lead and Iron.

Short Notes **(7x5=35)**

3. Classify antacids and discuss the qualities of an ideal antacid.
4. Explain in detail the principle involved in the assay of calcium gluconate with reactions.
5. What are cathartics. Explain the chemical properties of any one of them.
6. Discuss the electrolytes used in replacement therapy.
7. Summarize the preparation, properties and uses of potassium permanganate.
8. Outline the history of Indian pharmacopoeia.
9. Illustrate with reactions the assay of ferrous sulphate.

Answer Briefly **(10x2=20)**

10. State two examples for haematinic.
11. Define dentifrices with examples
12. Mention the uses of activated charcoal and zinc sulphate
13. State the Henderson-Hasselbalch equation for determining pH of a solution.
14. Explain the significance of limit test.
15. Define Pharmacopoeia and monograph.
16. Define antidote with examples.
17. Write the molecular formula of sodium nitrite and potash alum
18. How will you carry out pretreatment procedure for the limit test for chloride in $KMnO_4$.
19. Mention the molecular formula for the following inorganic substances.
    - Ferrous sulphate
    - Magnesium sulphate
    - Sodium bicarbonate
    - Calcium carbonate

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