

FACULTY OF PHARMACY

B. Pharmacy I Year (NON-CBCS) (Backlog) Examination, April / May 2023

Subject: Pharmaceutical Inorganic Chemistry

Time: 3 Hours

Max. Marks: 70

Note: Answer any five questions. All questions carry equal marks.

1. (a) Discuss about sources of impurities in pharmaceuticals.
(b) Classify inorganic pharmaceutical based on their therapeutic applications with examples.
2. (a) Explain the principle and procedure involved in the limit test for Iron and chlorides.
(b) Write the general procedure for qualitative tests for cations.
3. (a) What are antacids? Write the method of preparation, assay and uses of Calcium carbonate and Aluminium hydroxide gel.
(b) Write a note on acid base regulators.
4. (a) Discuss the importance of sodium in the body. Write the preparation, properties and uses of sodium chloride and sodium bicarbonate.
(b) Explain in brief about dialysis fluids.
5. (a) Write preparation, properties and uses of (i) Sodium metabisulphite
(ii) Copper sulphate (iii) Zinc chloride
(b) Write a brief note on desiccants.
6. (a) Give the preparation and uses of following compounds.
(i) Dicalcium phosphate (ii) Magnesium stearate
(iii) Ferrous sulphate (iv) Sodium phosphate
(b) What are adsorbents write a note on activated charcoal
7. (a) What are emetics? Write the preparation, properties and uses of potassium antimony tartarate.
(b) Define and classify expectorants with examples. Write the preparation, assay and uses of potassium iodide.
8. (a) Write a note on antidotes.
(b) What are inhalants and give their significance?
9. (a) What are Astringents? Write the methods of preparation, assay and uses of zinc oxide and bismuth subcarbonate.
(b) Write a note on dentifrices.
10. (a) Give the preparation, test for purity and uses of following compounds.
(i) Silver nitrate (ii) Hydrogen peroxide (iii) Boric acid
(b) Write a note on cements and fillers

~~Library~~

G.Pulla reddy College of Pharmacy
Hyderabad

Code No: E-12150/NON-CBCS

FACULTY OF PHARMACY

B. Pharmacy I –Year (NON-CBCS) (Backlog) Examination, April / May 2023

Subject: Pharmaceutics–I (General & Dispensing Pharmacy)

Time: 3 Hours

Max. Marks: 70

Note: Answer any five questions. All questions carry equal marks.

1. (a) Write a note on evolution of pharmacy.
(b) Explain the importance and procedure for pharmacist registration.
2. (a) If adult dose of a drug is 750mg. Calculate the dose for
(i) 3 months old infant (ii) 3 years child (iii) 7 years child (iv) 12 years boy
(b) Convert 60% and 40% alcohol to proof strength.
3. (a) Describe different types of containers and closures.
(b) Write about cautionary labels for different formulations.
4. (a) Write a note on parts of prescription with example.
(b) Define dosage form. Classify dosage forms.
5. (a) Describe different methods for preparation of emulsions.
(b) Differentiate lotions and liniments.
6. (a) Describe the preparation and labelling of eye, ear and nasal drops.
(b) Write a note on throat paints and collodions.
7. (a) Describe suppositories bases and preparation of suppositories.
(b) Write a note on lozenges and pills.
8. (a) Describe therapeutic incompatibility and methods to overcome it with examples.
(b) Write a note on jellies.
9. (a) Explain in detail preparation of tinctures.
(b) Discuss in brief about uses of official medicinal gases.
10. (a) Describe therapeutic and diagnostic uses of radio pharmaceuticals.
(b) Discuss in brief containers and fittings used for medicinal gases.

FACULTY OF PHARMACY

B. Pharmacy I Year (NON-CBCS) (Backlog) Examination, April 2023

Subject: Anatomy, Physiology and Health Education

Time: 3 Hours

Max.Marks:70

Note: Answer any five questions. All questions carry equal marks. (5 x 14 = 70 Marks)

1. (i) Define the following anatomical terms with examples
(a) Lateral (b) Distal (c) Inferior (d) Anterior
(ii) Describe the structure and functions of epithelial and nervous tissue.
2. (i) Identify the principal bones of the axial skeleton system and mention their functions.
(ii) Discuss the active and passive transport across the plasma membrane.
3. (i) What is a synapse? Define and explain a reflex arc?
(ii) Define blood pressure. What are the factors affecting changes in blood pressure?
4. (i) Discuss the anatomy and physiology of heart.
(ii) Explain in detail the process of neurotransmission and add a note on action potential?
5. List the hormones secreted from anterior pituitary and add a note on any four hormones?
6. Describe anatomy of lungs with a neat labelled diagram and explain in detail the physiology of respiration?
7. Explain the anatomy of ear and write the physiology of hearing?
8. Briefly explain the anatomy of nephron? Explain the terms glomerular filtration, tubular secretion and tubular reabsorption.
9. (i) Write in detail about family planning methods?
(ii) Write short notes on neoplasms
10. (i) Write a note on inflammation?
(ii) Write on nutritional disorders associated with water soluble vitamin deficiency.

FACULTY OF PHARMACY

B. Pharmacy I-Year (Non -CBCS) (Backlog) Examination, April / May 2023

Subject: Basic Computer Applications

Time: 3 Hours

Max.Marks:70

Note: Answer any five questions. All questions carry equal marks.

(5 x 14 = 70 Marks)

1. (a) Draw basic structure of computer and explain its components.
(b) Write the characteristics of computers.
2. (a) Write briefly on different types of printers.
(b) What is operating system? Write functions and importance of operating system.
3. Write a note on (i) Operators (ii) Expressions (iii) Input and Output statements.
4. Write control statements in 'C' (i) If-Else (ii) While Do (iii) Break and Continue.
5. Write a note on the following (i) Features of MS-Word (ii) Formatting paragraphs
(iii) Spellings and Grammar (iv) Mail merge in MS-Word
6. Write a note on the following (i) Features of MS-Excel
(ii) Mathematical and statistical functions
(iii) Charts and Graphs in MS-Excel
7. (a) Write briefly on (i) Features of MS-Power point (ii) Different views
(iii) Slide design (iv) Transitions and animations in MS-Power point
8. Write on (i) Database concepts and preparation on database table
(ii) Queries (iii) Sorting and Filtering (iv) Table relationships
9. Write a note on (i) Structure and organization of WWW (ii) Browsers
(iii) Search engines (iv) E-mail
10. (a) What is SQL? Write about SQL commands with examples.
(b) Write a note on chemical database design and their tools.

FACULTY OF PHARMACY

B. Pharmacy I - Year (NON-CBCS) (Backlog) Examination, November 2022

Subject: Biology

Time: 3 Hours

Max. Marks: 70

Note: Answer any five questions. All questions carry equal marks.

1. (a) Describe the structure and functions of plant cell?
(b) Describe the various roots modified for physiological function?
2. (a) Discuss the types of simple dry fruit.
(b) Describe the morphology and histology of monocot root with neat labelled diagram.
3. (a) Give an account of floral characteristics of apocynaceae and add a note on medicinal importance.
(b) Describe the floral features of leguminosae and add a note on their economic importance.
4. (a) Give an account of the floral characters of solanaceae and mention three medicinally important plants.
(b) Describe the distinguishing characteristics of umbelliferae family.
5. (a) Describe Kreb's cycle.
(b) Write a note on methods of absorption in plants.
6. (a) What is Mutation? Explain in detail.
(b) Discuss polyploidy and its advantages in plant science.
7. Explain in detail the structure of plant cell?
8. (a) Explain the structure of skeletal and smooth muscles?
(b) Draw a neat labelled diagram of alimentary canal of frog?
9. (a) Define the word vector and give examples.
(b) Discuss the life cycle of house fly.
10. (a) Add a note on Trypanosomiasis?
(b) Discuss the life cycle of leishmania?

FACULTY OF PHARMACY

B. Pharmacy I – Year (NON-CBCS) (Backlog) Examination, November 2022

Subject: Mathematics

Time: 3 Hours

Max. Marks: 70

Note: Answer any five questions. All questions carry equal marks.

1. (a) If $\frac{1}{x} = 1 + \log_a bc$, $\frac{1}{y} = 1 + \log_b ca$, $\frac{1}{z} = 1 + \log_c ab$, then prove that $x + y + z = 1$.
 (b) Prove that $\cos A = \frac{\cos 3A}{2\cos 2A - 1}$. Hence find $\cos 15^\circ$.
2. (a) If $a^x = b^y = c^z$ and $y^2 = zx$ prove that $\log_b a = \log_a b$.
 (b) If $A+B+C=180^\circ$, then prove that $\sin 2A + \sin 2B + \sin 2C = 4 \sin A \sin B \sin C$.
3. (a) Find $\frac{dy}{dx}$ if $y = e^t + \cos t$, $x = \log t + \sin t$
 (b) Prove that $\lim_{x \rightarrow 3} \frac{x^3 - 8x^2 + 45}{2x^2 - 3x - 9} = -\frac{7}{3}$.
4. (a) Find the derivative of $\frac{\cos x}{x^2} - \frac{e^x}{5x+4}$.
 (b) $\lim_{x \rightarrow 0} \frac{\sqrt{3+x} - \sqrt{3-x}}{x} = \frac{1}{\sqrt{3}}$
5. (a) Evaluate $\int \frac{1}{3+2\cos x} dx$
 (b) Evaluate $\int \frac{1}{3+5x-2x^2} dx$
6. (a) Evaluate $\int \frac{3x+7}{3x^2+14x-5} dx$
 (b) Evaluate $\int \sec x \log(\sec x + \tan x) dx$
7. (a) If $P = \begin{bmatrix} 0 & 1 \\ 2 & 3 \end{bmatrix}$, $Q = \begin{bmatrix} -1 & 2 \\ 4 & 3 \end{bmatrix}$, $R = \begin{bmatrix} 2 & -1 \\ 6 & 5 \end{bmatrix}$ show that $P(Q+R) = PQ+PR$.
 (b) Show that $\begin{vmatrix} 1 & a & a^2 \\ 1 & b & b^2 \\ 1 & c & c^2 \end{vmatrix} = (a-b)(b-c)(c-a)$

8. (a) Solve the equations $3x+4y+5z=18$, $2x-y+8z=13$ and $5x-2y+7z=20$ by matrix inversion method.
- (b) Find the rank of the matrix $\begin{vmatrix} 1 & 2 & 3 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{vmatrix}$
9. (a) Find the equation of the circle passing through the point $(1,4)$, $(3,4)$, $(3,2)$.
- (b) Find the equation of the line cutting off intercepts a, b on the coordinate axes such that $a+b=5$, $ab=6$.
10. (a) Find the equation of line which divides the line joining $A(0,2)$ and $B(5,-3)$ in the ratio $4:7$ and with slope $1/3$.
- (b) Show that the points $(-6,0)$, $(-2,2)$, $(-2,-8)$ and $(1,1)$ are concyclic.

FACULTY OF PHARMACY

B. Pharmacy I –Year (NON-CBCS) (Backlog) Examination, November 2022

Subject: Pharmaceutics–I (General & Dispensing Pharmacy)

Time: 3 Hours

Max. Marks: 70

Note: Answer any five questions. All questions carry equal marks.

1. (a) Write a note on pharmacy as a career.
(b) Describe United States Pharmacopoeia.
2. (a) Convert 30° UP and 45° OP into % v/v alcohol.
(b) Prepare 500ml of 40% alcohol from 60% alcohol and water.
(c) What is the dose for child of 7yrs old if adult dose is 800mg?
3. (a) Define prescription. Write a note on care required in handling prescriptions.
(b) Describe the sources of errors in prescription.
4. (a) Write a note on general dispensing procedures.
(b) Write a note on colors, flavors and sweeteners.
5. (a) Write a note on Mixtures preparation and labelling.
(b) Describe preparation methods for aromatic waters and spirits.
6. (a) Describe preparation methods and labelling of lotions and collodions.
(b) Define suspensions. Explain preparation of suspension with an example.
7. (a) Describe ointment bases and preparation of simple ointment.
(b) Write a note on preparation and labelling of effervescent granules.
8. (a) Write a note on chemical incompatibility and methods to overcome.
(b) Give an example for physical incompatibility due to insolubility and how to overcome it.
9. (a) Write a note on official medicinal gases handling and storage.
(b) Write a note on extracts official in IP.
10. Write a note on Radio Pharmaceuticals preparation and diagnostic uses.

FACULTY OF PHARMACY

B. Pharmacy I Year (NON-CBCS) (Backlog) Examination, November 2022

Subject: Pharmaceutical Inorganic Chemistry

Time: 3 Hours

Max. Marks: 70

Note: Answer any five questions. All questions carry equal marks.

1. (a) Classify inorganic pharmaceuticals based on their therapeutic application with examples.
(b) Mention the principle and procedure involved in the limit test for heavy metals.
2. (a) Define limit test. Explain the principle and procedure involved in the limit test for arsenic with a neat labelled diagram.
(b) Give four characteristic tests for group IV cations.
3. (a) Give the preparation, assay and uses of the following compounds.
(i) Magnesium sulphate (ii) Potassium Citrate (iii) Sodium Bicarbonate
(b) Write a note on hemodialysis fluids.
4. (a) What are Laxatives? Write preparation, properties of any two laxatives.
(b) What are antacids? Write the method of preparation, assay and uses of Calcium carbonate and Aluminium hydroxide gel.
5. (a) What are haematinics. Write the preparation, properties, assay and uses of ferrous Sulphate.
(b) Write a brief note on antioxidants and suspending agents.
6. (a) Give the preparation and uses of the following.
(i) Sodium phosphate (ii) Aluminium stearate (iii) Zinc chloride
(b) Write a note on desiccants.
7. (a) Write preparation, properties and use of (i) Zinc sulphate (ii) Copper sulphate
(b) Write a note on inhalants.
8. (a) What are antidotes. Explain about antidotes used in cyanide poisoning.
(b) What are Expectorants? Write the method of preparation, properties and assay of Ammonium Chloride.
9. (a) What are Astringents? Write the method of Preparation, assay and uses calcium hydroxide and zinc oxide.
(b) Explain the role of fluorides as anticaries agents with examples.
10. (a) Explain the principle and procedure involved in the assay of hydrogen peroxide and potassium permanganate.
(b) Write a note on (i) Diagnostic agents (ii) Oral antiseptics

FACULTY OF PHARMACY

B. Pharmacy I-Year (NON-CBCS) (Backlog) Examination, November 2022

Subject: Anatomy, Physiology and Health Education

Time: 3 Hours

Max. Marks: 70

Note: Answer any five questions. All questions carry equal marks.

(5 x 14 = 70 Marks)

1. a) Define tissue. Classify various types of connective tissues and explain any two with a neat labelled diagram.
b) Explain general principles of membrane permeability?
2. Explain the various parts of the following bones with neat diagrams (A) Coccyx (B) Thoracic (C) Humerus (D) Carpels
3. a) Describe the structures and functions of brainstem.
b) Explain the following G (i) Neuron (ii) Ganglion (iii) Synapse
4. a) Define clot. Explain various pathways in the process of blood clotting.
b) Write a note on role of Vitamin K in blood clotting
5. a) Discuss the gross anatomy of alimentary canal.
b) Write a note on hormones secreted from posterior pituitary gland.
6. a) Explain the physiology of respiration.
b) Describe the histology of small intestine.
7. a) Explain in detail about the anatomy of Ear.
b) Write about structure and functions of taste buds.
8. a) What is GFR? Explain various factors affecting GFR.
b) Explain the physiology of olfaction?
9. a) Describe signs, symptoms and different stages of inflammation.
b) Write about various intrauterine devices in family planning
10. a) Define Shock. Discuss different types of shock.
b) Write a note on edema and Embolism.

FACULTY OF PHARMACY

B. Pharmacy I – Year (NON-CBCS) (Backlog) Examination, March 2022

Subject: Pharmaceutical Inorganic Chemistry

Time: 3 Hours

Max. Marks: 70

Note: Answer any five questions.

(5 x 14 = 70 Marks)

- 1 (a) Explain the classification of Inorganic Pharmaceuticals based on their therapeutic classes with examples.
(b) Write the principle and procedure involved in the limit test for chlorides.
- 2 (a) Explain the Principle and Procedure involved in the Limit test for Arsenic with neat labelled diagram.
(b) What is quality control? Write a note on tests for purity.
- 3 (a) Write the method of preparation, properties, assay and uses of sodium chloride and calcium gluconate.
(b) Explain in brief about acid base regulators.
- 4 (a) What are antacids? Write the method of preparation, properties, assay and uses of Calcium carbonate and Aluminium hydroxide gel.
(b) Write a note on Haemodialysis fluids.
- 5 (a) What are haematinics. Write the preparation, properties, assay and uses of ferrous Sulphate.
(b) Write the preparation, properties, assay and uses of
(i) Magnesium stearate (ii) Aluminium phosphate
- 6 (a) What are antioxidants? Write the preparation, properties and uses of Sodium sulphite.
(b) Write a note on activated charcoal and Bentonite.
- 7 (a) Define emetics. Write the preparation, properties, assay and uses of Copper sulphate.
(b) What are antidotes? Explain in brief about sodium thiosulphate and sodium nitrite.
- 8 (a) Define expectorants. Write the preparation, properties, assay and uses of Ammonium chloride and potassium iodide.
(b) Write a note on Inhalants.
- 9 Give the preparation, properties, assay and uses of
(i) Potassium Permanganate (ii) Zinc oxide (iii) Iodine.
- 10 (a) What are Dentifrices? Write the preparation, properties and uses of calcium phosphate strontium chloride.
(b) Write a note on activated dimethicone & Lithium carbonate.

Library

**G.Pulla Reddy College of Pharmacy
Hyderabad**

FACULTY OF PHARMACY

B. Pharmacy I Year (Non-CBCS) (Backlog) Examination, December 2021

Subject: Anatomy, Physiology and Health Education

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions. All questions carry equal marks.

(4 x 17^{1/2} = 70 Marks)

- 1 (a) Discuss the properties and functions of osseous tissue.
(b) Write a note on membrane permeability.
- 2 Explain the various parts of the following bones with neat diagrams
(a) Coccyx (b) Thoracic (c) Humerus (d) Carpels.
- 3 (a) What is a neuron? Explain the physiology of nerve impulse conduction.
(b) Explain the composition and function of food.
- 4 (a) What is a synapse? Define and explain a reflex arc.
(b) Define blood pressure. What are the factors affecting changes in blood pressure?
- 5 (a) Discuss the anatomy and physiology of respiration.
(b) Add a note on the enzymes involved in digestion.
- 6 (a) List the hormones secreted from anterior pituitary gland.
(b) Add a note on oxytocin.
- 7 (a) Discuss the anatomy of eye with neat labelled diagram.
(b) Explain in detail the physiology of vision.
- 8 (a) Explain the anatomy of kidney with a neat labelled diagram.
(b) Add a note on different types of taste buds.
- 9 (a) Classify vitamins with examples and write their deficiencies.
(b) Add a note on chemical methods of contraception.
- 10 (a) Discuss about inflammation.
(b) Explain in detail about neoplasms.

FACULTY OF PHARMACY

B. Pharmacy I Year (Non-CBCS) (Backlog) Examination, December 2021

Subject: Basic Computer Applications

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions. All questions carry equal marks.

(4 x 17 ½ = 70 Marks)

- 1 (a) Write about basic structure and characteristics of computers.
(b) List out the commonly used Input and Output devices of computer. Write about MICR and OCR.
- 2 (a) Explain different types of storage devices for computers.
(b) Write briefly on different types of printers.
- 3 (a) Write Operators and Expression in C-Language.
(b) Write Input-Output statements used in C-Language.
- 4 Explain the control statements with examples.
(i) if-Else (ii) WHILE – DO (iii) FOR (iv) BREAK AND CONTINUE.
- 5 (a) Discuss about creating, editing and formatting document in MS-Word.
(b) Write briefly on (i) Spellings and Grammar (ii) Mail merge in MS-Word.
- 6 (a) Write the features available in MS-Excel.
(b) Explain different types of charts and graphs with MS- Excel data.
- 7 (a) Write about the features of MS – Power Point.
(b) Write notes on (i) Background (ii) Transitions and Animations (iii) Slide Design.
- 8 (a) What is database? Write about different data types used in MS-Access.
(b) Write briefly on (i) Sorting and filtering (ii) Table relationships
(iii) Importing and Exporting.
- 9 Explain (i) Structure and organization of www (ii) E-Mail
(iii) Types of indexing tools and search strategies (iv) Internet.
- 10 (a) Write the feature of SQL. Compare MS- Access and SQL server.
(b) Write chemical database design and their tools.

FACULTY OF PHARMACY

B. Pharmacy I – Year (NON-CBCS) (Backlog) Examination, December 2021
Subject: Mathematics

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.**(4 x 17 ½ = 70 Marks)**

- 1 (a) If $a = \log_{24} 12$, $b = \log_{36} 24$, $c = \log_{48} 36$ then prove that $1 + abc = 2bc$.
 (b) If $A+B+C=180^\circ$, prove that $\sin 2A + \sin 2B + \sin 2C = 4 \sin A \sin B \sin C$.
- 2 (a) Prove that $7 \log \frac{16}{15} + 5 \log \frac{25}{24} + 3 \log \frac{81}{80} = \log 2$.
 (b) If $\tan A = \frac{1}{2}$ and $\tan B = \frac{1}{3}$ what is the value of $A + B$.
- 3 (a) Find $\lim_{x \rightarrow 2} \frac{x^2 - 5x + 6}{10 - 3x - x^2}$.
 (b) Differentiate $\log(\sec x + \tan x)$.
- 4 (a) Find $\lim_{x \rightarrow -2} \frac{x^2 + x - 2}{x + 2}$.
 (b) Differentiate $\log(x + \sqrt{x^2 + 1})$.
- 5 (a) Evaluate $\int \frac{3x+7}{3x^2+14x-5} dx$.
 (b) Evaluate $\int \frac{1}{4x^2-4x-7} dx$.
- 6 (a) Evaluate $\int \frac{1}{2x^2+3x-\left(\frac{11}{4}\right)} dx$.
 (b) Evaluate $\int \frac{1}{5+4\cos x} dx$.
- 7 (a) If $A = \begin{bmatrix} 3 & -2 \\ 1 & 6 \end{bmatrix}$ $B = \begin{bmatrix} 4 & -1 \\ 2 & 5 \end{bmatrix}$ find AB and BA .
 (b) Show that $\begin{vmatrix} bc & b+c & 1 \\ ca & c+a & 1 \\ ab & a+b & 1 \end{vmatrix} = (a-b)(b-c)(c-a)$.

8 (a) Show that $\begin{vmatrix} a & a^2 & 1 \\ b & b^2 & 1 \\ c & c^2 & 1 \end{vmatrix} = (a-b)(b-c)(c-a).$

(b) If $A = \begin{bmatrix} 2 & -4 \\ -5 & 3 \end{bmatrix}$ then find (a) $A+A$ (b) AA

9 (a) Find the equation of the line passing through the point (2,-3) and having intercepts whose ratio is 3:2.

(b) Find the equations of the circle which passes through (6,5) (4,1) and whose center lies on the line $4x+3y-24=0$.

10 (a) Prove that the set of points lie on a straight line and find its equation

(4,1), (5,-2), (6,-5).

(b) Find the circle which is concentric with $x^2+y^2-6x-4y-12=0$ and passing through the point (-2,14).

* * *

FACULTY OF PHARMACY

B. Pharmacy I – Year (NON-CBCS) (Backlog) Examination, December 2021 Subject: Biology

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.

(4 x 17 ½ = 70 Marks)

- 1 (a) What is inflorescence? Discuss various types of racemose inflorescence.
(b) Explain different phases and significance of mitosis.
- 2 (a) Explain internal structure of dicot stem with a neat labelled diagram.
(b) Describe modifications of the root.
- 3 (a) Write a note on economic importance of umbelliferae family.
(b) Give an account on floral characteristics and economic importance of scrophylariaceae.
- 4 (a) List out the medicinal plants from Leguminosae and give their importance.
(b) Describe the vegetative and floral characteristics of apocyanaceae.
- 5 (a) Discuss hybridization and its advantages in plant science.
(b) What are the differences between absorption and transpiration?
- 6 (a) Describe Respiration in detail.
(b) Write a note on gene mutations.
- 7 (a) Discuss the histology of rabbit kidney.
(b) Draw a neat labelled diagram of frog heart.
- 8 (a) Give details of histology of rabbit's endocrine system.
(b) Write the differences between plant cell and animal cell.
- 9 (a) Describe the life history of plasmodium with neat labeled diagram.
(b) Give an account on tapeworm.
- 10 Discuss the life history of mosquitos and their role in causing diseases in humans.

FACULTY OF PHARMACY

B. Pharmacy I – Year (NON-CBCS) (Backlog) Examination, December 2021
Subject: Pharmaceutics – I (General and Dispensing Pharmacy)

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.

(4 x 17 ½ = 70 Marks)

- 1 (a) Write a brief note on career opportunities available for Pharmacy profession.
(b) What are ideal weighing techniques to minimize the errors?
- 2 (a) Convert 60° UP and 20° OP to percentage V/V of alcohol.
(b) Prepare 500 ml of 20% alcohol from 95% of alcohol.
(c) Calculate the dose for a 4 kg of weight child, when the adult dose of drug is 100 mg.
- 3 (a) What is Prescription? Explain various parts of prescription with suitable examples.
(b) Write the sources of errors and care required in dispensing of prescription.
- 4 (a) Write a note on colors, flavors and sweeteners used in prescription.
(b) Write a brief note on containers, closures and labeling and packing of dispensing container for dispensing of dosage forms.
- 5 (a) What are mixtures? Classify different types of mixtures. Discuss general procedure for dispensing mixtures.
(b) Define Emulsion? Write a brief note on Emulsifying agents and methods of preparation of emulsions.
- 6 Write principle, procedure and labeling of following preparations.
(i) Aromatic waters (ii) Syrups (iii) Suspensions.
- 7 Write a note on (i) Ointment bases (ii) Suppositories and their bases
(iii) Effervescent granules (iv) Lozenges.
- 8 (a) Define Incompatibility. Explain different types of incompatibility with examples.
(b) Identify the types of incompatibility in the following prescription and add a note on how to overcome the incompatibility.
Rx Potassium chlorate – 0.6g, Tannic acid – 0.3g, Sucrose – 0.3 g, Water – upto 20.00 g. make a powder.
- 9 (a) Explain the soxhlet extraction method with neat labeled diagram.
(b) Discuss the procedure of maceration for extraction of drugs.
- 10 (a) Write a note on diagnostic and therapeutic applications of radio pharmaceuticals.
(b) Discuss about handling and storage of medicinal gases.

FACULTY OF PHARMACY

B. Pharmacy I – Year (NON-CBCS) (Backlog) Examination, December 2021
Subject: Pharmaceutical Inorganic Chemistry

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.

(4 x 17½ = 70 Marks)

- 1 (a) Give two characteristic tests for any one cation and anion with reactions.
(b) Write the principle and procedure involved in the limit test for
(i) Sulphates (ii) Iron
- 2 (a) Explain the principle and procedure involved in the limit test for heavy metals.
(b) Classify Inorganic Pharmaceuticals based on their therapeutic classes with examples.
- 3 (a) What are laxatives? Write the preparation, properties and uses of
(i) Magnesium sulphate (ii) Sodium phosphate.
(b) Write a brief note on adsorbents.
- 4 (a) Describe the importance of calcium in the body. Write the preparation, properties and uses of (i) Calcium gluconate (ii) Calcium chloride.
(b) Write a note on haemodialysis fluids.
- 5 (a) What are pharmaceutical aids. Write a brief note on suspending agents.
(b) Define desiccants with examples. Give the preparation, properties, test for purity of silica gel.
- 6 (a) Define hematinics. Write the preparation, assay and uses of ferrous sulphate.
(b) Write a brief note on antioxidants.
- 7 (a) Define expectorants. Write the preparation, properties, assay and uses of Ammonium chloride.
(b) What are antidotes and write a note on sodium thiosulphate.
- 8 (a) Define emetics. Write the preparation, properties, assay and uses of Zinc sulphate & copper sulphate.
(b) Write a brief note on inhalants.

- 9 (a) Write the preparation, assay and uses of boric acid and hydrogen peroxide.
(b) What are Astringents? Write the method of preparation and uses of zinc oxide and calcium hydroxide.
- 10 (a) Write a brief note on (i) Antneoplastic agent (ii) Anthithyroid agents
(iii) Diagnostic agent.
(b) Write preparation, properties and uses of
(i) Stannous fluoride (ii) Calcium carbonate.

* * *

FACULTY OF PHARMACY
B.Pharmacy I Year (Non-CBCS) (Backlog) Examination, July 2021

Subject: Anatomy, Physiology and Health Education

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions. All questions carry equal marks. (4 x 17 1/2 = 70 Marks)

- 1 (a) Discuss the structure and functions of different connective tissue.
(b) Draw a neat labelled diagram of neuron.
- 2 Describe the following bones (a) Femur (b) Scapula (c) Ulna (d) Sternum.
- 3 (a) Discuss the anatomy of cerebellum with neat labelled diagram.
(b) Write the functions of medulla oblongata.
- 4 (a) Explain the various parts and functions of central nervous system.
(b) Define cardiac cycle. Explain the various events in a cardiac cycle.
- 5 (a) Explain the gross anatomy of respiratory passage.
(b) Explain the disorders of hypo and hyper secretion of (i) pituitary gland (ii) thyroid gland.
- 6 (a) Discuss the physiology of alimentary canal with regard to gastric secretions and enzymes involved in digestion.
(b) Explain the terms (i) respiratory volume (ii) vital capacity (iii) anoxia.
- 7 (a) Explain the various parts, structure and functions of the kidney.
(b) Draw a neat labelled diagram of eye.
- 8 (a) Explain the physiology of hearing.
(b) Discuss the physiology of urine formation.
- 9 (a) Discuss the various procedures for family planning.
(b) Discuss the pathological processes of inflammation and repair.
- 10 (a) Classify vitamins with examples and write their deficiencies.
(b) Add a note on chemical methods of contraception.

FACULTY OF PHARMACY

B.Pharmacy I Year (Non-CBCS) (Backlog) Examination, August 2021

Subject: Basic Computer Applications

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions. All questions carry equal marks. (4 x 17^{1/2} = 70 Marks)

- 1 (a) Draw the block diagram of the computer and explain the components of computer.
(b) Describe about different types of memory chips.
- 2 (a) Enlist the different output devices used for computers. Write about different types of printers.
(b) What is operating system? Explain briefly about the importance and functions of operating system
- 3 (a) Write a note on data input and output statements in C-Language.
(b) Write briefly on (i) Arithmetic operators (ii) Expressions.
- 4 Write briefly on (i) if-Else (ii) For (iii) Arrays (iv) Library functions.
- 5 (a) Write the features available in MS-Word.
(b) Explain (i) Spellings and Grammar (ii) Mail merge in MS-Word with examples.
- 6 (a) Write about different types of charts available in MS-Excel.
(b) Write the mathematical and statistical functions in MS-Excel.
- 7 Write briefly on (i) Wizards and Templates (ii) Custom animations (iii) Different views available in MS-Power point.
- 8 Explain about database preparation, querying, sorting & filtering and table relationship in MS-Access.
- 9 Explain (i) Structure & Organization of the WWW
(ii) Internet browsers
(iii) HTML
(iv) E-Mail.
- 10 (a) Write about chemical database design and their tools.
(b) Write about SQL commands.

Library
G.Pulla Reddy College of Pharmacy
Hyderabad

FACULTY OF PHARMACY

B. Pharmacy I – Year (Non-CBCS) (Backlog) Examination, July 2021

Subject : Pharmaceutical Inorganic Chemistry

Time: 2 Hours

Max. Marks: 70

Note: Answer any Four Questions

(4 x 17^{1/2} = 70 Marks)

- 1) a) Mention the classification of Inorganic Pharmaceuticals based on therapeutic classes with examples.
b) Write a note on tests for purity.
- 2) a) Explain the principle and procedure involved in the limit test for arsenic with neat labelled diagram.
d) Write about two qualitative tests for identification of chloride ion and Ammonium ions
- 3) a) Define and classify laxatives with examples.
b) Mention the method of preparation, properties and uses of sodium bicarbonate, Magnesium trisilicate and calcium gluconate
- 4) a) What are electrolyte replenishers? Write the gluconate composition of Ringers solution
b) Mention the method of preparation, limit tests and uses of potassium chloride, sodium citrate and activated charcoal
- 5) a) What are antioxidants? Explain about one antioxidant in detail
b) Explain the role of Iodides & fluorides in human body
c) Write about Bentonite
- 6) Mention the method of preparation, properties & uses of (i) Ferrous fumarate
(ii) Aluminum stearate (iii) Titanium dioxide
- 7) a) What are antidotes? Explain about one antidote in detail.
b) Mention the method of preparation, assay and uses of zinc sulphate and potassium iodide
- 8) Mention the method of preparation, properties & uses of (i) Potassium antimony tartarate (ii) Ammonium chloride (iii) Oxygen
- 9) a) What are astringents? Add a note on cements & fillers
b) Write the method of preparation assay & uses of Boric acid and calcium phosphate
- 10) Mention the method of preparation properties & uses of (i) Potassium permanganate (ii) lithium Carbonate (iii) plaster of paris

FACULTY OF PHARMACY

B. Pharmacy I-Year (Non-CBCS)(Backlog) Examination, August 2021

Subject: Mathematics

Time : 2 Hours

Max. Marks: 70

Note: Answer any four questions. All questions carry equal marks. (4x17^{1/2}=70 Marks)1 (a) If $(x + y)^2 = 125 \cdot xy$ show that $2 \log(x + y) = 3 \log 5 + \log x + \log y$.(b) Show that $\sin A = \frac{\sin 3A}{1 + 2 \cos 2A}$. Find the value of $\sin 15^\circ$.2 (a) If $A + B + C = 180^\circ$. Prove that $\sin 2A + \sin 2B + \sin 2C = 4 \sin A \sin B \sin C$ (b) 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.

3 (a) Find the derivative of

(i) e^{3x} (ii) $\sin 4x$ (iii) $\tan(3x + 4)$ (iv) $(\log x) \cot x$ 4 (a) Find $\frac{dy}{dx}$ if $y = 2at$, $x = at^2$.(b) If $S = 16t^2 - 112t$ find $\frac{ds}{dt}$, $\frac{d^2s}{dt^2}$.5 (a) Evaluate $\int \frac{3x + 7}{3x^2 + 14x - 5} dx$.(b) Evaluate $\int \sin(3 - 4x) dx$.6 Evaluate $\int \frac{2x + 3}{3x^2 + 14x - 5} dx$ 7 (a) Evaluate $A = \begin{bmatrix} 3 & 1 \\ -1 & 2 \end{bmatrix}$ show that $A^2 - 5A + 7I = 0$.(b) Show that $\begin{vmatrix} bc & b+c & 1 \\ ca & c+a & 1 \\ ab & a+b & 1 \end{vmatrix} = (a-b)(b-c)(c-a)$.

8 (a) Solve the system of equations using matrix inversion method

$$3x + 4y + 5z = 18, \quad 2x - y + 8z = 13, \quad 5x - 2y + 7z = 20.$$

(b) If $A = \begin{bmatrix} 2 & -4 \\ -5 & 3 \end{bmatrix}$ find AA' .9 Find the equations of the circle which passes through (6, 5), (4, 1) and whose centre lies on the line $4x + 3y - 24 = 0$.

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

(b) Find the equation to the line joining (4, 3) and (5, -1).

FACULTY OF PHARMACY

B. Pharmacy I-Year (Non-CBCS)(Backlog) Examination, August 2021

Subject: Biology

Time : 2 Hours

Max. Marks: 70

Note: Answer any four questions. All questions carry equal marks. (4x17^{1/2} = 70 Marks)

- 1 Describe in detail about meiosis- cell division in plants.
- 2 a) Draw neat labeled diagram of transverse section of dicot stem and explain.
b) Explain about leaf modification.
- 3 a) Describe the taxonomy of Leguminosae family.
b) Describe vegetative and floral characters of Solanaceae family.
- 4 a) Describe the taxonomy of Rubiaceae family.
b) Describe vegetative and floral characters of Apocynaceae family.
- 5 a) Describe replication of DNA.
b) Describe about absorption in plants.
- 6 a) Explain mutation in detail.
b) Explain polyploidy in plants with examples.
- 7 a) Give differences and similarities between animal cell and plant cell.
b) Give details of histology of rabbit's endocrine system.
- 8 a) Explain the reproductive system of frog with neat labeled diagram.
b) Describe the histology of intestine of rabbit.
- 9 a) Describe the life history of plasmodium with neat labeled diagram.
- 10 Describe morphology and life history of housefly.

FACULTY OF PHARMACY

B. Pharmacy I Year (NON - CBCS) (Backlog) Examination, March 2021

Subject: Anatomy, Physiology and Health Education

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.

(4 x 17 ½ = 70 Marks)

1. (a) Explain the various mechanisms of transport across the plasma membrane.
(b) Write a note on bone tissue.
2. (a) Define tissue? Write about properties and functions of epithelial tissue.
(b) Explain the various types of muscle tissues.
3. (a) Explain the physiology of nerve impulse.
(b) Write about autonomic nervous system.
4. (a) Define clot? Explain the different types of pathways involved in the process of clotting.
(b) Write a note on ECG.
5. (a) Define Vital capacity? Discuss the neuronal regulation of respiration.
(b) Write about hypo and hyper secretions of parathyroid gland.
6. (a) Discuss about formation, storage, release and actions of thyroid hormones.
(b) Explain the gross anatomy of alimentary canal.
7. (a) Explain the physiology of urine formation and the factors affecting it.
(b) Write about structure and functions of skin.
8. (a) Explain anatomy of ear with a neat labeled diagram.
(b) Write about the physiology of smell.
9. (a) Write about family planning.
(b) Define neoplasm? Explain various types of neoplasm.
10. (a) Write about any two nutritional disorders.
(b) Write a note on edema and shock.

* * *

FACULTY OF PHARMACY**B. Pharmacy I-Year (Non-CBCS)(Backlog) Examination, March 2021****Subject : Basic Computer Applications****Time: 2 Hours****Max. Marks: 70****Note: Answer any four questions.****(4 x 17^{1/2} = 70 Marks)**

- 1 (a) Write a note on Input and Output devices used for computer. Explain input devices.
(b) Write about basic structure and characteristics of computers.
- 2 (a) Write about types of printers?
(b) What are computer viruses? How can we protect the computers from viruses?
(c) What is operating system? Explain briefly on Windows OS.
- 3 Explain with examples:
 - (i) Arithmetic operators
 - (ii) Expressions
 - (iii) Input and Output statements
 - (iv) Arrays
- 4 Explain control statements with examples: (i) If- Else (ii) For (iii) Goto
- 5 (a) Write the features and uses of MS-Word.
(b) Write about :
 - (i) Formatting paragraphs
 - (ii) Mail merge in MS-Word.
- 6 Explain:
 - (i) Data types
 - (ii) Mathematical and statistical functions
 - (iii) Charts and Graphs in MS- Excel
- 7 Write a note on:
 - (i) Different views
 - (ii) Templates
 - (iii) Slide design
 - (iv) Transitions and animations in MS- Power point.
- 8 (a) What is database? Write about features of MS-Access.
(b) Write a note on:
 - (i) Queries
 - (ii) Forms
 - (iii) Importing and Exporting
- 9 Write a note on:
 - (i) Structure and organization of WWW
 - (ii) Search engines
 - (iii) Browsers
 - (iv) HTML
 - (v) E-Mail
- 10 (a) What is SQL? Write about SQL commands with examples.
(b) Write comparisons for Access and SQL Server

FACULTY OF PHARMACY

B. Pharmacy I-Year (Non-CBCS)(Backlog) Examination, March 2021

Subject: Mathematics

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.

(4 x 17^{1/2} = 70 Marks)

- 1 (a) If $x = 1 + \log_a bc$, $y = 1 + \log_b ca$, $z = 1 + \log_c ab$ prove that $xyz = xy + yz + zx$.
- (b) Show that $A + B = 45^\circ \Leftrightarrow (1 + \tan A)(1 + \tan B) = 2$. Hence show that $\tan\left(22\frac{1}{2}^\circ\right) = \sqrt{2} - 1$.
- 2 (a) Prove that $2 \log \frac{3}{5} + 3 \log \frac{5}{7} + 2 \log \frac{7}{3} = \log \frac{5}{7}$.
- (b) Show that $\cos A = \frac{\cos 3A}{2 \cos 2A - 1}$. Hence find $\cos 15^\circ$.
- 3 (a) Find the derivative of $e^x - x^2 \sin x$.
- (b) Find the maximum and minimum values of $f(x) = x^3 - 6x^2 + 9x + 15$.
- 4 (a) If $y = ae^x + be^{-x}$ find $\frac{dy}{dx}$ and $\frac{d^2y}{dx^2}$.
- (b) Find the derivative of $5^x + e^x \log x$.
- 5 Evaluate $\int \frac{1}{3 + 5x - 2x^2} dx$.
- 6 (a) Evaluate $\int \frac{3x + 7}{3x^2 + 14x - 5} dx$.
- (b) Evaluate $\int (5 - 7x)^4 dx$.
- 7 (a) Show that $\begin{vmatrix} 1 & a & a^2 \\ 1 & b & b^2 \\ 1 & c & c^2 \end{vmatrix} = (a - b)(b - c)(c - a)$.
- (b) Find the inverse of $A = \begin{bmatrix} 1 & 0 & 2 \\ 2 & 1 & 0 \\ 3 & 2 & 1 \end{bmatrix}$.

..2..

8 (a) Show that $\begin{vmatrix} bc & b+c & 1 \\ ca & c+a & 1 \\ ab & a+b & 1 \end{vmatrix} = (a-b)(b-c)(c-a)$.

(b) If $P = \begin{bmatrix} 0 & 1 \\ 2 & 3 \end{bmatrix}$, $Q = \begin{bmatrix} -1 & 2 \\ 4 & 3 \end{bmatrix}$ and $R = \begin{bmatrix} 2 & -1 \\ 6 & 5 \end{bmatrix}$

Show that $P(Q+R) = PQ + PR$

9 Find the equations of the circle passing through the points (1, 2), (3, -4) and (5, -6).

10 Find the equation of the straight lines cutting off intercepts a, b on the coordinate axes such that $a + b = 5$, $ab = 6$.

FACULTY OF PHARMACY

B. Pharmacy I-Year (Non-CBCS)(Backlog) Examination, March 2021

Subject: Biology

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.

(4x17^{1/2}=Marks)

- 1 a) What are plant tissues? Classify them and explain any one type in detail.
b) Describe mitosis- cell division in plants.
- 2 a) Draw neat labeled diagram of transverse section of dicot leaf and explain.
b) Explain about root modification.
- 3 a) Describe the taxonomy of Apocynaceae family.
b) Describe vegetative and floral characters of Leguminosae family.
- 4 a) Describe the taxonomy of Solanaceae family.
b) Describe vegetative and floral characters of Rubiaceae family.
- 5 Describe photosynthesis in plants.
- 6 a) What is hybridization and explain?
b) Describe about transpiration.
- 7 a) Give difference between animal cell and plant cell.
b) Explain the digestive system of frog with neat labeled diagram.
- 8 a) Give details of histology of rabbit liver.
b) Describe various types of animal tissues.
- 9 Describe the life history of Entamoeba with neat labeled diagram.
- 10 Describe morphology and life history of mosquitoes.

FACULTY OF PHARMACY**B. Pharmacy I Year (Non-CBCS) (Backlog) Examination, October 2020****Subject: Mathematics****Time: 2 Hours****Max. Marks: 70****Note: Answer any four questions.****(4x17½=70 Marks)**

1. (a) Prove that $2 \log \frac{3}{5} + 3 \log \frac{5}{7} + 2 \log \frac{7}{3} = \log \frac{5}{7}$.
 (b) $A + B = 45 \Leftrightarrow (1 + \tan A)(1 + \tan B) = 2$. Hence find $\tan 22\frac{1}{2}$.
2. (a) If $\frac{\log_2 a}{4} = \frac{\log_2 b}{6} = \frac{\log_2 c}{3P}$ and $a^3 b^2 c = 1$, find P.
 (b) Show that $\sin A = \frac{\sin 3A}{1 + 2 \cos 2A}$. hence find $\sin 15$.
3. (a) Find the derivative of $\cot x$ using first principle.
 (b) Find $\lim_{x \rightarrow 0} \frac{3x^2 + 5x - 1}{x^2 - 2x + 6}$.
4. (a) Find the derivative of $y = \log \left(x + \sqrt{x^2 - 1} \right)$.
 (b) Find $\lim_{x \rightarrow 0} \frac{2x^3 - 3x^2 + 1}{9x^2 + 8x + 7}$.
5. (a) Evaluate $\int \frac{1}{6x^2 + 7} dx$.
6. Evaluate $\int \frac{4x + 3}{\sqrt{2x^2 + 3x + 5}} dx$.
7. Show that $\begin{vmatrix} a & b & c \\ a^2 & b^2 & c^2 \\ a^3 & b^3 & c^3 \end{vmatrix} = abc(a-b)(b-c)(c-a)$.
8. If $A = \begin{bmatrix} 2 & 3 \\ -1 & 2 \end{bmatrix}$ show that $A^2 - 4A + 7I = 0$.
9. (a) Find the equation to the circle passing through (1, 1), (3, 2), (2, -1).
 (b) Prove that the set of points lie on a straight line and find its equation
 (1, 11), (2, 15), (-3, -5).
10. (a) Find the equation to the circle passing through (2, 1), (-6, 7), (5, 5).
 (b) Find any two sides of the Triangle formed by.
 (-8, -2), (-4, -6), (-1, 5).

Library**G.Pullareddy College of Pharmacy, Hyderabad**

FACULTY OF PHARMACY

B. Pharmacy I Year (Non-CBCS) (Backlog) Examination, October 2020

Subject: Biology

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.

(4x17½=70 Marks)

1. (a) Explain the structure of plant cell with neat labeled diagram.
(b) Give various morphological features of flower.
2. (a) Discuss about various types of root system in plants.
(b) Explain in detail Stem modification and their significance.
3. (a) Discuss the taxonomy of apocynaceae family.
(b) Write about floral diagram and floral formula of leguminosae family.
4. (a) Discuss the taxonomy of umbelliferae family.
(b) Discuss the taxonomy of solanaceae family.
5. (a) Write about anaerobic respiration in plants.
(b) Write a note on polyploidy.
6. (a) Describe DNA replication.
(b) Write a note on mutation.
7. (a) Write a note on endocrine glands of rabbit.
(b) Discuss the histology of rabbit kidney.
8. (a) Write a note on physiology of digestion in frog.
(b) Discuss the histology of rabbit liver.
9. (a) Describe life cycle of entamoeba with neat labeled diagram.
(b) Discuss the life cycle of tape worm and disease caused by tape worm.
- 10 (a) Describe the life cycle of housefly.
(b) Discuss the role of mosquitoes and leishmania as vector in spreading the disease.

FACULTY OF PHARMACY

B. Pharmacy I Year (Non-CBCS) (Backlog) Examination, October 2020

Subject: Pharmaceutical Inorganic Chemistry

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.

(4x17½=70 Marks)

1. (a) What are limit tests? Mention the principle and procedure involved in the limit test for chlorides and lead.
(b) Mention two qualitative tests for any two actions with chemical reactions.
2. (a) Explain the classification of Inorganic pharmaceuticals based on applications with examples and uses.
(b) Give a brief note on Limit Test for Salphates.
3. (a) What is Replacement Therapy? Mention the preparation, properties, assay and uses of Sodium Chloride and Potassium Citrte.
(b) What are Laxatives? Explain about one Laxative in detail.
4. (a) What are acidifiers? Explain the preparation, properties, limit tests and uses of Aluminium hydroxide gel and Magnesium oxide.
(b) Write a note on Activated Charcoal.
5. What are pharmaceutical aids? Mention the preparation, properties and uses of (i) Sodium sulphate (ii) Aluminium phosphate (iii) Titanium oxide.
6. Mention the method of preparation, properties assay and uses of (i) Ferrous Fumarate (ii) Sodium phosphate (iii) Zinc chloride
7. (a) Mention the preparation, properties, assay and uses of Potassium Iodide and Sodium thiosulphate.
(b) Write a note on one Inhalant in detail.
8. (a) What are Emetics? Mention the method of preparation , properties, limit tests and uses of Potassium antimony tastasatc and Zinc Sulphate.
(b) Write the preparation and uses of Ammonium Chloride and Copper sulphate.
9. (a) Explain the method of preparation, properties assy and uses of (i) Hydrogen Peroxide (ii) Zince Sulphate (iii) Calcium Carbonaote.
10. (a) What are Diagnostic agents? Explain with one example in detail.
(b) Mention the preparation, properties assay and uses of Sodium Fluoride and Potassium Perchlorate.

FACULTY OF PHARMACY**B. Pharmacy I-Year (Non-CBCS) (Backlog) Examination, December 2019****Subject : Pharmaceutical Inorganic Chemistry****Time: 3 Hours****Max Marks: 70****Note:** Answer all questions. All questions carry equal marks

1. a) Explain the Principle and Procedure involved in the Limit test for heavy metals and Iron 5+3
 b) Mention two Characteristic tests for any one cation and anion with chemical reactions 6

OR

 c) Explain the classification of Inorganic Pharmaceuticals based on their therapeutic classes with examples 10
 d) What is quality control? Write a note on tests for purity 4
2. a) What are antacids? Write the method of preparations, properties, assay and uses of magnesium carbonate and sodium phosphate 1+8
 b) Write a note on Haemodialysis fluids 5

OR

 c) Mention the method of preparation, properties, assay and uses of potassium chloride and calcium gluconate 5+5
 d) Explain about one adsorbent in detail. 4
3. a) Explain the method of preparation, properties, limit tests and uses of (i) Aluminium Stearate (ii) Sodium Sulphite (iii) Titanium Oxide 9
 b) Give a brief note on purified water 5

OR

 c) What are Haematinics? Mention the method of preparation, properties and assay of ferrous sulphate 1+5
 d) Give a brief note on Silica gel and Bentonite 8
4. a) Mention the method of preparation, Properties assay and uses of (i) Ammonium chloride (ii) Copper Sulphate (iii) Potassium antimony tartrate 12
 b) Write a note on Nitrous Oxide 2

OR

 c) What are antidotes? Explain about the antidotes used in cyanide poisoning in detail 10
 d) Give the preparation, properties, assay and uses of potassium iodide 4
5. a) Give the method of preparation, properties, assay and uses of (i) Silver nitrate (ii) Calcium Carbonate (iii) Boric acid (iv) Zinc Sulphate 3.5x4=14
 b) What are antineoplastic agents Give one example 2

OR

 c) Give a brief note on zinc oxide & Barium sulphate 4+4
 d) Write about Astringents 4

FACULTY OF PHARMACY

B. Pharmacy I-Year (NON-CBCS) (Backlog) Examination,

December 2019

Subject : Anatomy Physiology and Health Education

Time: 3Hours

Max. Marks: 70

Note: Answer All Questions, All Questions carry equal marks.

- 1) a) Classify various types of connective tissues. Explain any two with neat labeled diagram. (8)
b) Write a note on membrane permeability. (6)

OR
- 2) a) Discuss the properties and functions of osteous tissue. (6)
b) List out the axial bones and explain any two with neat labeled diagram. (8)
- 3) a) Discuss the physiology of nerve impulse in brief (8)
b) Define reflex arc. Explain various components of reflex arc. (6)

OR
- 4) a) Define cardiac cycle and explain various events in cardiac cycle. (8)
b) What is ECG? Explain various phases of ECG with labeled diagram. (6)
- 5) a) Explain the physiology of respiration. (8)
b) Write a note on enzymes involved in digestion. (6)

OR
- 6) a) Explain the mechanism of hormonal secretion . (8)
b) Write down the functions of thyroid and parathyroid glands. (6)
- 7) a) Describe the structure and functions of kidney with neat labeled diagram (8)
b) What is GFR? Explain the factors affecting GFR. (6)

OR
- 8) a) Explain the anatomy of ear with neat labeled diagram. (8)
b) Write the structure and functions of taste buds. (6)
- 9) a) What is family planning. Explain various temporary methods used in family planning. (8)
b) Write about embolism and edema. (6)

OR
- 10) a) Write the signs, symptoms and different stages of inflammation. (8)
b) Write about nutritional disorders associated with vitamin A deficiency. (6)

FACULTY OF PHARMACY

B. Pharmacy I Year (Non-CBCS) (Backlog) Examination, January 2020

Subject: Basic Computer Applications

Time: 3 Hours

Max. Marks: 70

Note: Answer all questions. All questions carry equal marks.

1. (a) Draw basic structure of computer and explain components. 7
(b) Write characteristics of computers. 4
(c) Write a note on computer virus. 3
- OR**
2. (a) What is computer virus? Explain how to protect the computers from computer viruses. 6
(b) Write about principles of flowcharting. 4
(c) What is operating system? Write its importance. 4
3. (a) Explain i) Operators ii) Expressions iii) Input-Output statements iv) Arrays in C-language. 14
- OR**
4. Explain FOR, WHILE and WHILE DO LOOP STATEMENTS in C-language with examples. 14
5. Explain i) Creating, editing and formatting document ii) Mail merge iii) Macro in MS-word. 14
- OR**
6. Explain i) Spread sheets ii) Mathematical and statistical tools iii) data types and formulas in Ms-Excel. 14
7. (a) Explain features of MS-Power point. 6
(b) Explain preparation of slides, applying slide design and transitions and animations in MS-Power point. 8
- OR**
8. Explain about contents in MS-Access
i) Database and its concept ii) Creating tables & Table relationships iii) Forms
iv) Importing and exporting data. 14
9. Write a note on i) Structure and organization of WWW and its features ii) HTML
iii) E-mail iv) Internet. 14
- OR**
10. (a) Write the features of SQL. Explain the SQL commands. 7
(b) Write a note on chemical database design and their tools. 7

FACULTY OF PHARMACY**B. Pharmacy 3/4 I-Semester (Non-CBCS) (Backlog) Examination,
January 2020****Subject: Pharmacology - I****Time: 3 Hours****Max. Marks: 70****Note: Answer all questions. All questions carry equal marks.**

1. (a) Write in detail about various biotransformation reactions with examples. 10
- (b) Define the following: 4
 - (i) Therapeutic Index.
 - (ii) Biological half life.

OR

- (c) Explain in detail about the advantages and disadvantages of different routes of drug administration. 14
2. (a) Write the pharmacological effects of acetyl choline. 7
- (b) Explain the various therapeutic uses and adverse reactions of (β) – adrenergic blockers. 7

OR

- (c) Explain the pharmacological actions and therapeutic uses of the following: 7+7
 - (i) Acetylcholinesterase Inhibitors.
 - (ii) β - Adrenergic blockers.
3. (a) Classify anti-depressants and explain the mechanism of action, adverse reactions and therapeutic uses of any two class of drugs. 6+8

OR

- (b) Write the classification of Non-steroidal anti-inflammatory agents and explain the details of any two classes of drugs. 6+8
4. (a) Define arrhythmia. Classify the anti-arrhythmic agents with examples. Write about the mechanism of action and adverse reactions of any one class of drugs. 2+5+7

OR

- (b) Write short notes on: 7+7
 - (i) Bronchodilators.
 - (ii) Anti-anginal agents.
5. (a) Classify the agents used in treatment of peptic ulcer disease. Write about the pharmacological actions and therapeutic uses of Ranitidine and Omeprazole. 4+5+5

OR

- (b) Write about the following: 7+7
 - (i) Anti-diarrhoeal agents.
 - (ii) Anti-emetic agents.

Library

G.Pulla Reddy College of Pharmacy
Hyderabad

FACULTY OF PHARMACY**B. Pharmacy I-Year (Non-CBCS) (Backlog) Examination, January 2020****Subject : Mathematics****Time: 3 Hours****Max Marks: 70****Note: Answer all questions. All questions carry equal marks**

1. a) If $X = 1 + \log a^{bc}$, $y = 1 + \log b^{ca}$ and $Z = 1 + \log c^{ab}$ prove that $xyz = xy + yz + zx$ 7
 b) If $A+B+C = 180$, Prove that $\sin 2A + \sin 2B + \sin 2C = 4 \sin A \sin B \sin C$ 7
OR
 c) If $\tan A = \frac{1}{2}$ and $\tan B = \frac{1}{3}$ What is the Value of $A+B$ 7
 d) Prove that $7 \log \frac{16}{15} + 5 \log \frac{25}{24} + 3 \log \frac{81}{80} = \log 2$ 7
2. a) Find the derivative of $\sin x$ using first principle 7
 b) Prove that $\lim_{x \rightarrow 3} \frac{x^3 - 8x^2 + 45}{2x^2 - 3x - 9} = -\frac{7}{3}$ 7
OR
 c) Show that $\lim_{x \rightarrow 4} \frac{\sqrt{x} - 2}{x - 4} = \frac{1}{4}$ 7
 d) Find the derivative of $y = e^x + (\log x) \sin x$ 7
3. a) Evaluate $\int \frac{1}{4 + 5 \sin x} dx$ 14
OR
 b) Evaluate $\int \frac{2x + 6}{x^2 + 3x - 6} dx$ 14
4. a) Show that $\begin{vmatrix} 1 & a & a^2 \\ 1 & b & b^2 \\ 1 & c & c^2 \end{vmatrix} = (a-b)(b-c)(c-a)$ 14
 b) Solve the equations $3x + 4y + 5z = 18$, $2x - y - 8z = 13$ and $5x - 2y + 7z = 20$ by matrix inversion method 14
OR
5. a) i) Find the equations of the Circle passing through the points $(1, 2)$, $(3, -4)$, and $(5, -6)$ 7
 ii) Find the equation of the line having intercepts a and b on the axes such that $a + b = 3$ and $ab = 1$ 7
OR
 b) Show that the points are co cyclic $(1, -6)$, $(5, 2)$, $(7, 0)$ and $(-1, 4)$ 14

FACULTY OF PHARMACY**B. Pharmacy I-Year (Non-CBCS) (Backlog) Examination, January 2020****Subject : Pharmaceutics-I (General and Dispensing Pharmacy)****Time: 3 Hours****Max Marks: 70****Note: Answer any all questions. All questions carry equal marks.**

1. a) What is Pharmacopoeia? Write about features of Indian Pharmacopoeia 7
 b) Discuss about the career opportunities available for Pharmacy profession 7
OR
 c) Convert 70° UP and 40° OP to percentage v/v of alcohol. 6
 d) Calculate the quantity of sodium chloride required to prepare 400ml of a 0.9 percentage of solution. 4
 e) Calculate the dose for a child of 4 years, when the adult dose of drug is 100 mg. 4
2. a) Define Prescription. Describe various parts of prescription with suitable examples. 7
 b) Write about sources of errors in handling of prescription and care required in dispensing of prescriptions. 7
OR
 c) Define a dosage form. Classify dosage forms and write their advantages and limitations of dosage form? 6
 d) Write a short note on containers and closures 4
 e) What are desirable qualities of containers for packing of pharmaceuticals? 4
3. a) What are syrups? Write brief note on different methods of preparation of syrups with examples? 5
 b) What are aromatic waters? Describe different methods used to prepare Aromatic waters? 5
 c) Write short note on i) Gargles ii) Collodions 4
OR
 d) Define Emulsion? Describe different types and methods of preparation of emulsions? 7
 e) Differentiate between i) Lotions and Liniments ii) Emulsions and Suspensions 7
4. a) What are ointments? Write about the different bases used in preparation of ointments 7
 b) What are suppositories? What are the different bases used in preparation of suppositories. Write different methods of preparation of suppositories? 7
OR
 c) Write a note on Effervescent granules 3
 d) Define Incompatibility? Explain physical incompatibility with examples? 6
 e) Identify the type of incompatibility in the following prescription and add a note on how to overcome the incompatibility
R_x Sodium bi carbonate – 1.5g, Borax – 1.5g, Phenol – 0.75g, Glycerin – 25.00g, Water – up to 100.00 ml. Prepare a spray solution. 5
5. a) What is extraction? Discuss various methods extraction. Explain the preparation of Tinctures and Extracts. 7
 b) Explain soxhlet continuous hot percolation process with neat labeled diagram. 7
OR
 c) Write a note on preparation and therapeutic applications of radio pharmaceuticals. 7
 d) Discuss the containers, fittings, handling and storage of medicinal gases. 7

FACULTY OF PHARMACY

B. Pharmacy I Year (Non-CBCS) (Backlog) Examination, August 2019

Subject: Anatomy Physiology & Health Education

Time: 3 Hours

Max. Marks: 70

Note: Answer all questions. All questions carry equal marks.

1. (a) Define and classify tissues. Write a brief note on nervous tissue. 8
(b) Explain the general principles of membrane potential. 6
OR
2. (a) Discuss active and passive transport across plasma membrane. 6
(b) Explain the following bones with neat diagram. 8
a. Sternum b. Sacrum
3. (a) Explain anatomy and physiology of parasympathetic nervous system. 8
(b) Write a note on Neurotransmission. 6
OR
4. (a) Explain various stages of conducting system of heart. 8
(b) Explain the composition of blood. 6
5. (a) Describe the anatomy of small intestine with neat labeled diagram. 8
(b) Explain the structure and functions of liver. 6
OR
6. (a) Describe the anatomy of small intestine with neat labeled diagram. 8
(b) Write a note on following terms. 6
a. Vital capacity b. Hypoxia c. Anoxia
7. (a) Explain the physiology of urine formation. 8
(b) Discuss the physiology of smell. 6
OR
8. (a) Discuss the physiology of vision. 8
(b) Describe the anatomy of skin with neat labeled diagram. 6
9. (a) Write about intrauterine contraceptive devices. 8
(b) Write about deficiency disorders of vitamin A. 6
OR
10. (a) Define neoplasm. Explain various types of neoplasms. 8
(b) Explain the following terms. 6
a. Embolism b. Nutritional disorders.

FACULTY OF PHARMACY

B. Pharmacy I - Year (Non-CBCS) (Backlog) Examination, August 2019

Subject: Pharmaceutics-I (General and Dispensing Pharmacy)

Time: 3 Hours

Max. Marks: 70

Note: Answer **All** Questions. All Questions carry **Equal Marks**.

- 1) a) What is Pharmacopoeia? Write about features of Indian Pharmacopoeia. **7 M**
 b) Write about Registration procedure for pharmacist. **7 M**
OR
 c) Calculate the dose for **i)** a 9 months old infant **ii)** a child of 5 years of age, when the adult dose of drug is 100 mg. **6 M**
 d) Calculate the amount of 95 percent alcohol required to prepare 400 ml of 45 percentage of alcohol. **4 M**
 e) Find the strength of 96 % v/v of alcohol in terms of proof spirit. **4 M**
- 2) a) Define Prescription. Explain various parts of prescription with suitable example. **7 M**
 b) Write about sources of errors in handling of prescription and how can minimize these errors. **7 M**
OR
 c) Define a dosage form. Classify dosage forms and write their advantages and limitations of dosage forms. **7 M**
 d) Write a note on prescription containers, closures and labeling of dispensed product. **7 M**
- 3) a) What are syrups? Write brief note on different methods of preparation of syrups with examples. **5 M**
 b) Write principle, procedure and labeling of following preparations
i) Aromatic waters **ii)** Calamine lotion **iii)** Emulsions **9 M**
OR
 c) What are mixtures? Classify different types of mixtures. Write general dispensing procedures for mixtures. **6 M**
 d) What are suspensions? Write about the formulation of suspensions with suitable examples? **5 M**
 e) Differentiate between lotions and liniments? **3 M**
- 4) a) What are ointments? Classify the different bases used in preparation of ointments with examples. **7 M**
 b) Write a note on **i)** Effervescent granules **ii)** Tablet triturates **7 M**
OR
 c) Define Incompatibility? What are the different types of incompatibilities? Write about physical incompatibility with examples? **9 M**
 d) Identify the type of incompatibility in the following prescription and add a note on how to rectify the incompatibility.
R_x Quinine sulphate - 1.5 g, Dilute sulphuric acid – 4.0 ml, Potassium iodide- 8.0 g, Water - up to 200.00 ml. Prepare a mixture. **5 M**

..2

FACULTY OF PHARMACY

B. Pharmacy I-Year (Non CBCS) (Backlog) Examination, July/August 2019

Subject : Pharmaceutical Inorganic Chemistry

Time : 3 Hours

Max. Marks: 80

Note: Answer All questions, All Questions carry equal marks.

- 1 a) What are Limit Tests? Write the significance of Limit Tests. (4)
b) Mention the classification of Inorganic Pharmaceuticals based on their applications with examples. (10)
- OR**
- 2 a) Mention the principle, procedure and apparatus involved in the Limit Test for Arsenic with a neat labeled diagram. (9)
b) Give two characteristic tests for any two cations with chemical reactions. (5)
- 3 a) What are Electrolyte Replenishers? Explain the importance of sodium in the Replacement therapy. (4)
b) Write the method of preparation, properties, assay and uses of Aluminum Hydroxide gel and calcium gluconate. (5+5)
- OR**
- 4 a) Mention the preparation, properties, limit tests and uses of Magnesium Sulphate and Potassium Chloride. (4+4)
b) What are Dialysis fluids? Write a note on Haemodialysis fluids. (6)
- 5 a) What are antioxidants? Write the preparation properties and uses of sodium sulphite. (5)
b) Give a note on Bentonite and Silica gel. (4+5)
- OR**
- 6 Mention the method of preparation, properties assay and uses of following compound.
(i) Magnesium stearate (ii) Aluminum sulphate (iii) Zinc Chloride. (4+5+5)
- 7 a) What are Expectorants? Write the preparation properties, assay and uses of Ammonium Chloride and Potassium Iodide. (1+4+4)
b) Write a note on Inhalants. (5)
- OR**
- 8 Give the preparation, properties, limit tests and uses of:
(i) Copper sulphate (ii) Sodium thiosulphate (iii) Sodium nitrite (5+5+4)
- 9 a) What are Dentifrices? Write the preparation, properties and uses of calcium carbonate and Zinc oxide. (1+3+3)
b) Give a note on Activated Dimethicone and Plaster of Paris. (4+4)
- OR**
- 10 Give the preparation, properties, assay and uses of
(i) Potassium Permanganate (ii) Iodine (iii) Barium Sulphate (5+5+4)

FACULTY OF PHARMACY**B. Pharmacy I-Sem (CBCS) (Backlog) Examination, August 2019****Subject: General Pharmacy****Time: 3 Hours****Max. Marks: 70****Note: Answer ALL questions. All questions carry equal marks.**

1. (a) Explain the detailed pharmacopoeial monograph contents with an example of API. 9
- (b) Explain in detail about various career opportunities in pharmacy. 5
- OR**
- (c) Give brief explanation to USP and BP. 7
- (d) Discuss about the affiliating bodies of Pharmaceutical education. 7
2. (a) Define Normality, Molarity and Molality. 4
- (b) Write short note on minimum weighable amounts and calibration of weights. 6
- (c) How much quantity of 95% alcohol will be required to prepare 400 ml of 45% alcohol. 4
- OR**
- (d) Explain in detail about the selection and care of weights and balances. 5
- (e) Convert 80° OP and 40° UP to percentage V/V alcohol. 4
- (f) What are isotonic solutions and explain different methods for adjusting tonicity. 5
3. (a) Define prescription. Explain in detail about the Parts of prescription. 7
- (b) Calculate the dose if the adult dose of the drug is 500mg for: 7
 - i) 8 months old infant ii) 6 years child iii) Boy of 13 years
- OR**
- (c) Explain parts of prescription. Explain various types of dose calculations for infants and children. 7
- (d) Write a note on i) Responding to prescription ii) Pricing of prescription. 7
4. (a) Classify containers with respect to method of closures. 4
- (b) Write about various cautionary and advisory labels for different formulations. 6
- (c) What are the ideal properties of the container closure system? 4
- OR**
- (d) Write a note on child resistant containers. 6
- (e) Explain in detail about the container closure system for semisolid preparations meant for application to the skin or mucosa. 8
5. (a) Write a note on Hydrocolloids. 7
- (b) Discuss in brief about the uses, safety measures and precautions while handling medical gases. 7
- OR**
- (c) Write a note on i) Antioxidants ii) Surfactants 4+4
- (d) Discuss in detail about the preparation and uses of any two radiopharmaceuticals. 6

Library

G.Pulla Reddy College of Pharmacy
Hyderabad

FACULTY OF PHARMACY**B. Pharmacy I – Year (Non-CBCS)(Backlog) Examination, August 2019****Subject : Mathematics****Time : 3 hours****Max. Marks : 70****Note : Answer all questions. All questions carry equal marks.**

1 a) i) Find the solution of the equation $10^{x+3} = 6^{2x}$.

ii) If $\tan 35^\circ = K$ then the value of $\frac{\tan 145^\circ - \tan 125^\circ}{1 + \tan 145^\circ \cdot \tan 125^\circ}$.

OR

b) i) $\log 2^x + \log 2^{(x-2)} = 3$.

ii) if $\tan r = \frac{1}{3}$ and $\tan s = \frac{1}{7}$ then show that $\tan (2\alpha + \beta) = 1$.

2 a) i) Find the derivative of $\tan x$ using first principle.

ii) Show that the function is not differentiable at 2 where

$$f(x) = \begin{cases} x; & 0 \leq x \leq 2 \\ 2; & x \geq 2 \end{cases}$$

OR

b) i) Find the maximum and minimum values of the polynomial

$$f(x) = x^3 - 4x^2 + 8x - 6$$

ii) If $u = xy f\left(\frac{y}{x}\right)$, prove that $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} = 2u$.

3 a) i) Evaluate $\int \frac{1}{3+5x-2x^2} dx$

ii) $\int \frac{1+\sin^2 x}{1+\cos^2 x} dx$

OR

b) i) Evaluate $\int \frac{1}{4+5\sin x} dx$

ii) Evaluate $\int \frac{2x+6}{x^2+3x-6} dx$

4 a) i) If $A = \begin{bmatrix} a^2 & ab & ac \\ ab & b^2 & bc \\ ac & bc & c^2 \end{bmatrix}$ and $a^2 + b^2 + c^2 = 1$ then find A^2 .

ii) Solve the equation $7x + 5y - 13z + 4 = 0$, $9x + 2y + 11z - 37 = 0$, $3x - y + z = 2$ by matrix inversion method.

OR
LibraryG.Pulla Reddy College of Pharmacy
Hyderabad

- 2 -

b) i) Find the rank of the matrix $A = \begin{bmatrix} 1 & -1 & 2 & 3 \\ 2 & 2 & 3 & 4 \\ 3 & 4 & 5 & 6 \end{bmatrix}$

ii) If $A = \begin{bmatrix} 0 & 2 & 1 \\ -2 & 0 & -2 \\ -1 & x & 0 \end{bmatrix}$ is a skew symmetric matrix, then find the value of x.

- 5 a) i) Find the equation of circle passing through the points (1, 0) (0, 1) (1, 1).
ii) Find the equation of the line having intercepts a and b on the axes such that $a + b = 3$ and $ab = 1$.

OR

- b) i) Write the basic mathematical principles are used in Biological testing.
ii) Find the equation of circle passing through (-7, 1) and having centre at (-4, -3).

FACULTY OF Pharmacy
B. Pharmacy I-Year (Non-CBCS) (Backlog) Examination, July 2019

Subject : Biology

Time : 3 Hours

Max. Marks: 70

Note: Answer All questions, All Questions carry equal marks.

- 1 a) Discuss general characters of Fungi.
b) Write an essay on Meiosis.
OR
c) Describe the plant cell.
d) Give the morphological details of Flower.
- 2 a) List out the medicinal plants from umbelliferae and Solanaceae and give their importance.
OR
b) Mention the medicinal value and Inflorescence of Leguminosae.
- 3 a) Discuss polyploidy and its advantages in plant science.
b) Describe about Mutation in the origin of new species?
OR
c) What are the differences between Respiration and Photo synthesis?
d) Describe Transpiration on in detail.
- 4 a) Describe the Histology of Liver.
b) Mention the differences between Animal and Plant Cell.
OR
c) Draw a neat labeled diagram of Frog Alimentary Canal.
- 5 a) Describe in detail "Plasmodium" with the help of a diagram.
b) Give the details of life History of Housefly.
OR
c) Write an essay on Trypanosomiasis.
d) Define the word vector and give examples.
