

QP Code:2101



Hall Ticket Number

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
Pharm.D (6 YDC) I Year (Main) Examination, AUGUST-2026

Course:Human Anatomy & Physiology

Time: 3 Hours Max.

Marks: 70

Question No.	Question	CO	BL
PART-A	Answer the following questions.	10 × 2 = 20	
1	Define connective tissue. Mention its general characteristics.	I	1
2	Define Anatomy and Physiology.	I	1
3	Define haemopoiesis and mention its primary site in adults.	II	1
4	Describe the physiological functions of platelets	II	2
5	Describe the functions and composition of gastric juice	III	2
6	State two functions of testosterone.	IV	2
7	Name the parts of the internal ear responsible for hearing and equilibrium.	IV	1
8	Define motor unit.	V	1
9	Define aerobic exercise.	V	1
10	What is muscle fatigue?	V	1

Question No.	Question	CO	BL
PART-B	Answer any 5 questions.	5 × 10 = 50	
11	Explain the gross structure of a long bone and functions of skeletal system.	I	2
12	Describe the anatomy of the respiratory system with a neat labelled diagram. Explain the functions of each respiratory organ.	II	1
13	Describe the ABO blood group system. Discuss its genetic basis, antigen-antibody characteristics, principles of blood grouping, and transfusion compatibility.	II	2
14	Describe the anatomy of the alimentary canal with a neat labelled diagram.	III	2
15	Describe the structure of a neuron with a neat labelled diagram. Explain the classification of neurons and the functions of neuroglial cells.	III	2
16	Evaluate how hormonal changes regulate each phase of the menstrual cycle, and relate these hormonal variations to the physiological changes in the ovary and uterus."	IV	5
17	Explain the anatomy of the eye and Analyse the mechanism of vision.	IV	4
18	Explain neuromuscular junction and excitation-contraction coupling	V	2

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
Pharm.D (6 YDC) I Year (Main) Examination, AUGUST-2026

Course:Pharmaceutics

Time: 3 Hours Max.

Marks: 70

Question No.	Question	CO	BL
PART-A	Answer the following questions.	10 × 2 = 20	
1	Define Pharmacopoeia and listout the Indian Pharmacopoeia Editions	I	1
2	Outline the role of Pharmacy in the health care system	I	2
3	Comapre and contrast gargles and mouth wash	II	4
4	Compare Deliquescence and Efflorescence substances	II	4
5	Differentiate suspensions and emulsions	III	1
6	Define displacement value and give its importance	III	2
7	Find the concentration of sodium chloride required to produce a solution isoosmotic with blood plasma by molecular weight method. (Molecular weight of sodium chloride = 58.5)	IV	5
8	Add a note on double maceration process	IV	3
9	Differentiate synergism and antagonism	V	2
10	What are sutures and ligatures, give their essential properties	V	1

Question No.	Question	CO	BL
PART-B	Answer any 5 questions.	5 × 10 = 50	
11	Mention the role and significance of National Formulary	I	5
12	Explain the parts of prescription by neat label diagram	I	5
13	Give a outline on the preparation methods of syrups	II	2
14	Classify emulsions and discuss in brief.	III	1
15	Write about the formulation of a pharmaceutical suspension. List its ingredients and explain the role of each ingredient.	III	2
16	Elaborate different factors affecting extraction process	IV	6
17	Define surgical dressings, give their classification and uses in detail	V	2
18	Explain physical incompatibility in detail with supporting examples and methods to overcome it.	V	2

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
Pharm.D (6 YDC) I Year (Main) Examination, AUGUST-2026

Course:Medicinal Biochemistry

Time: 3 Hours Max.

Marks: 70

Question No.	Question	CO	BL
PART-A	Answer the following questions.	10 × 2 = 20	
1	Explain any three factors that affect enzyme activity.	<i>I</i>	2
2	What is HMP shunt	<i>II</i>	1
3	What is Transamination and Deamination	<i>II</i>	1
4	Define glycogenolysis	<i>II</i>	1
5	Name the hormones involved in the regulation of carbohydrate metabolism.	<i>II</i>	1
6	Define Nucleotides,Nucleosides.	<i>III</i>	4
7	Give the tests for any three abnormal constituents of urine.	<i>IV</i>	2
8	What is Creatinine clearance? Write its diagnostic significance?	<i>IV</i>	5
9	Write a note on SGOT & SGPT.	<i>IV</i>	4
10	Write about clinical significance of cholesterol.	<i>V</i>	2

Question No.	Question	CO	BL
PART-B	Answer any 5 questions.	5 × 10 = 50	
11	Write detailed note on Electron Transport Chain (ETC), Oxidative Phosphorylation, and their biomedical significance.	<i>I</i>	1
12	Define Glycolysis. How many ATPs are generated through glycolysis? Illustrate.	<i>II</i>	1
13	Discuss in detail the main stages of the citric acid cycle and its significance	<i>II</i>	2
14	Explain Nitrogen balance, Positive and Negative Nitrogen balance .Give a note on Urea cycle.	<i>II</i>	2
15	Write a note on DNA damage and repair mechanism.	<i>III</i>	2
16	Write about quantitative estimation of serum bilirubin.	<i>IV</i>	2
17	Write a note on dye test for excretory function of liver?	<i>IV</i>	2
18	How to determine Sodium, Calcium, Potassium in the body fluids.	<i>V</i>	2

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
Pharm.D (6 YDC) I Year (Main) Examination, AUGUST-2026

Course:Pharmaceutical Organic Chemistry

Time: 3 Hours Max.

Marks: 70

Question No.	Question	CO	BL
PART-A	Answer the following questions.	10 × 2 = 20	
1	What is bond polarity, polar covalent bond and non-polar covalent bond?	I	2
2	Write the type of hydrogen bonding and its importance?	I	2
3	Define Positional Isomerism with example?	I	6
4	Predict whether water is a polar molecule or nonpolar molecule.justify?	I	6
5	What are homologous series? Give an example?	II	4
6	How carboxylic acids are converted into acid chlorides and esters?	III	4
7	Discuss the mechanism involved in Phase Transfer Catalysis.	III	1
8	What are addition reactions? Give an example of Electrophilic and free radical reaction.	III	4
9	Explain the diazotization reaction with equation?	IV	4
10	Propose a Reaction example for Crossed Aldol Condensation?	IV	6

Question No.	Question	CO	BL
PART-B	Answer any 5 questions.	5 × 10 = 50	
11	Define Geometrical isomerism and its types. Apply the sequence rules for nomenclating the geometrical isomers	I	3
12	Explain in detail about Bayer's strain theory. Give their limitations and add a note on Sachse Mohr's theory.	III	4
13	Explain why 1,3-pentadiene is more stable than 1,4-pentadiene.	III	5
14	Discuss the effect of substituent on the acidity of carboxylic acid. write the conversion of acid to their derivatives.	III	2
15	Explain in detail about the mechanism, kinetics and reactivity of alkyl halides towards S N 2 reaction.	III	1
16	Explain the importance and applications of oxidation-reduction reactions of aldehydes and ketones?	IV	3
17	Explain the bimolecular displacement (SN2) mechanism, orientation in nucleophilic substitution reactions, and compare aliphatic nucleophilic substitution with aromatic nucleophilic substitution?	IV	3
18	Write the Structure, Preparation, Assay and medicinal uses of a. Tartaric acid b. Aspirin	V	2

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
Pharm.D (6 YDC) I Year (Main) Examination, AUGUST-2026

Course:Pharmaceutical Inorganic Chemistry

Time: 3 Hours Max.

Marks: 70

Question No.	Question	CO	BL
PART-A	Answer the following questions.	10 × 2 = 20	
1	Write the principle involved in limit test for sulphates	I	2
2	Discuss Lewis concept of Acids and bases	II	2
3	What are pH Indicators. Give examples	II	1
4	How do you prepare 0.1 N perchloric acid solution?	II	3
5	Define and classify Cathartics with examples?	III	2
6	Define Acidifiers. Give one example.	III	1
7	Define pharmaceutical aids. Give four examples of pharmaceutical aids.	IV	1
8	Mention two uses of potassium permanganate.	IV	1
9	What are Radiopharmaceuticals and write their use in pharmaceutical industries.	V	3
10	Define Isotopes and Radioisotopes. mention their stability .	V	2

Question No.	Question	CO	BL
PART-B	Answer any 5 questions.	5 × 10 = 50	
11	Discuss Neutralisation curves and explain in detail on a) Strong Acid-Strong Base b) Weak acid-Weak base	II	3
12	a) Explain about Differentiating and levelling effect with examples? b) Write the Pharmaceutical Applications of Non aqueous titrations	II	3
13	Explain in detail about the steps involved in gravimetric analysis.	II	4
14	Define and classify Antacids with suitable examples. Discuss the method of preparation, Assay and uses of Aluminium hydroxide Gel?	III	4
15	Explain the method of preparation, Assay, uses and storage of a) Boric acid b) Hydrogen peroxide.	III	3
16	Explain the pharmaceutical importance of dental products in maintaining oral hygiene. Discuss the composition, mechanism of action, therapeutic applications, and storage of common dentifrices.	IV	4
17	What are Haematinics. Explain the role of haematinics in the prevention and treatment of iron deficiency anemia with suitable examples?	IV	3
18	Give the applications of Radioisotopes	V	3

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SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)(Autonomous)
Pharm.D (6 YDC) I Year (Main) Examination, AUGUST-2026

Course:Remedial Mathematics

Time: 3 Hours Max.

Marks: 70

Question No.	Question	CO	BL
PART-A	Answer the following questions.	10 × 2 = 20	
1	if $A = \begin{bmatrix} -2 & x-1 \\ 3 & 2 \end{bmatrix}$, $B = \begin{bmatrix} 2 & 3 \\ -3 & y \end{bmatrix}$ and $A + B = O$, find x and y	I	2
2	If $\sin\theta = 4/5$ and θ is acute, find $\cos\theta$ and hence $\tan\theta$	I	2
3	If $A = \begin{bmatrix} -3 & 2 \\ 5 & 4 \end{bmatrix}$ and $B = \begin{bmatrix} 6 & 1 \\ -3 & 2 \end{bmatrix}$, find $3A - 2B$	I	3
4	Find the slope of line joining the points (2,3) and (-1,2).	II	1
5	Find the derivative of the function $x^3 - 3/x + \cos x$ with respect to x.	III	3
6	Find $\lim_{x \rightarrow -2} \frac{x^2 - 4}{x + 2}$	III	2
7	If $y = x^4 + 1$, find d^2y/dx^2	III	3
8	Derive $\int \tan x dx$	IV	3
9	Find laplace transform of $t^3 - 3t + 5$	V	2
10	Solve $\frac{dy}{dx} = \frac{y}{x}$	V	2

Question No.	Question	CO	BL
PART-B	Answer any 5 questions.	5 × 10 = 50	
11	If $\sin A = 3/4$ and $\sin B = 5/13$, find $\sin(A + B)$	I	5
12	If $A = \begin{bmatrix} 3 & -5 \\ -4 & 2 \end{bmatrix}$ show that $A^2 - 5A = 14I$	I	5
13	Find the co-ordinates of vertex, focus and directrix of parabola $y^2 = 25x$	II	4
14	If $u = x^2 + y^2 + z^2$, prove that $x(\partial u/\partial x) + y(\partial u/\partial y) + z(\partial u/\partial z) = 2u$.	III	5
15	Find the derivative of the function $y = e^{2x}/\log x$ with respect to x.	III	4
16	$\int \frac{1}{1 + \cos x} dx$	IV	5
17	Find Laplace Transform of $e^{5t} \cos 4t$	V	5
18	Solve $(D^2 - 3D + 2)y = e^{5x}$	V	5
