Registration No : | | | | | | | | | | |

Total Number of Pages : 01

B. Pharm
BP103T

1st Semester Regular / Back Examination: 2021-22
PHARMACEUTICS
BRANCH(S): B. Pharma
Time : 3 Hour
Max Marks : 75
Q.Code : OF738

Answer Question No.1 (Part-1) which is compulsory, any seven from Part-II and any two from Part-III.
The figures in the right hand margin indicate marks.

Part-I

Q1 **Answer the following questions :** **(2×10)**

a) How you can calculate child dose according to dilling's formula?
b) Why clicking sound is found in emulsion preparation?
c) Differentiate between lotion and liniment?
d) Write the instruction to be written on label of biphasic liquid preparations.
e) Convert 50% alcoholic preparation to proof spirit.
f) What are the English meaning of t.i.d and sos
g) What is eutectic mixture?
h) Why tetracycline is not taken with milk for therapeutic use?
i) Name the two reasons responsible for physical incompatibility.
j) What is compound tragacanth?

Part-II

Q2 **Focused-Short Answer Type Questions- (Answer Any Seven)** **(5×7)**

a) Indian Pharmacopoeia
b) Suppositories
c) Posology
d) Deflocculated suspension
e) Factors influencing dermal penetration of drugs.
f) Stability problems of an emulsion and methods to overcome.
g) Dusting powders
h) Elixir
i) Throat Paint

Part-III

Long Answer Type Questions (Answer Any Two)

Q3 Differentiate between suspension and emulsion. Discuss about the preparation of emulsion. **(10)**

Q4 Define Incompatibility. Classify it. Describe about physical Incompatibility with its remedy. **(10)**

Q5 What is semisolid dosage form? Write in detail about method of preparation of ointments. **(10)**

Q6 What is prescription; write the importance of its parts with a typical format. **(10)**

Registration No: | | | | | | | | | | |

Total Number of Pages : 02

B. Pharm.
BP102T

1st Semester Regular / Back Examination: 2021-22
PHARMACEUTICAL ANALYSIS I
BRANCH(S): B.Pharma
Time : 3 Hour
Max Marks : 75
Q.Code : OF646

Answer Question No.1 (Part-1) which is compulsory, any eight from Part-II and any two from Part-III.
The figures in the right hand margin indicate marks.

Part-I

Q1 **Answer the following questions:** **(2×10)**

a) Define accuracy and precision.
b) What are self-indicators and universal indicators? Give examples.
c) What is titration error?
d) Calculate the pH of 0.1N H_2SO_4.
e) Explain the role of nitrobenzene in precipitation titration.
f) Why acetic acid is added in the preparation of perchloric acid solution?
g) Name two indicators used in acid-base titrations.
h) Write Nernst equation. Mention its importance.
i) Define conductance and resistance. Mention their units.
j) Differentiate iodometry and iodimetry.

Part-II

Q2 **Focused-Short Answer Type Questions- (Answer Any Seven)** **(5×7)**

a) What are the primary and secondary standards? Give the ideal requirements of a primary standard.
b) What are Neutralization curves? How is it useful in the selection of indicators in the titration between strong acid with the strong base?
c) Explain the concept of Masking and Demasking with suitable examples.
d) Explain the basic principles involved in redox titrations? Give the applications of titration with Potassium iodate.
e) Write the steps involved in gravimetric analysis. Add a note on the washing of precipitates.
f) Classify and explain the various EDTA titrations.
g) What is a polarographic curve? How it is plotted? Mention different areas in the polarographic curves.
h) Discuss pyrolysis curve in detail. Mention the applications.
i) Write the construction and working of the conductivity cell.

Part-III

Long Answer Type Questions (Answer Any Two)

Q3 Define and classify errors? Describe the various methods to minimize the errors. **(10)**

Q4 What are non aqueous titrations? Explain in detail the types of solvents used in non-aqueous titrations. Write the assay of Sodium Benzoate. **(10)**

Q5	Classify precipitation titration with examples. Explain Mohr's method in detail.	**(10)**
Q6	Explain the principle involved in potentiometric titration. Give the construction, working, advantages, and disadvantages of glass electrodes.	**(10)**

Registration No: | | | | | | | | | | |

Total Number of Pages : 02

B. Pharm.
BP104T

1st Semester Regular / Back Examination: 2021-22
PHARMACEUTICAL INORGANIC CHEMISTRY
BRANCH(S) : B.PHARMA
Time : 3 Hour
Max Marks : 75
Q. Code : OF695

Answer Question No.1 (Part-1) which is compulsory, any seven from Part-II and any two from Part-III.
The figures in the right hand margin indicate marks.

Part-I

Q1 **Answer the following questions :** **(2×10)**

a) Why dilute nitric acid is added in the limit test for Chloride?
b) What is lugol's Solution? Mention its uses.
c) What are dentifrices and anti-caries agents? Give examples.
d) Write down the principle involved in limit test for Sulphate.
e) Write any two effects of impurities in pharmaceutical substances.
f) What is blue vitriol? Mention its uses.
g) Define astringent. Give two examples.
h) What is half-life of a radioactive material? Mention the units of radioactivity.
i) What is achlorhydria? Mention its therapy.
j) Write down the composition and uses of ORS.

Part-II

Q2 **Focused-Short Answer Type Questions- (Answer Any Seven)** **(5×7)**

a) Write down the principle and procedure for the limit test of iron.
b) What are the ideal characteristics of antacid? Add a note on systemic antacids.
c) Write the different type of acid base theory with suitable examples.
d) Define haematinics and write down the monograph of Ferrous sulphate.
e) Describe the role of fluorides in dental care.
f) What are cathartics? Classify cathartics basing on their mechanism of action with suitable examples. Give the monograph of Magnesium sulphate.
g) Discuss various applications of radio pharmaceuticals.
h) Define antidotes. Classify antidotes according to their mechanism of action. Write down the monograph of sodium thiosulphate.
i) Define expectorants. Give the mechanism of action of expectorants. Write down the monograph of any one inorganic expectorant.

Part-III

Long Answer Type Questions (Answer Any Two)

Q3 What are buffers? Explain in detail buffer action and buffer equation. Discuss the applications of buffer in pharmacy. **(10)**

Q4 Explain in detail, the limit test for Arsenic along with a neat and labeled diagram. **(10)**

Q5 Classify antimicrobial agents with suitable examples. Mention the mechanism action of antimicrobial agents. Write down the monograph of Chlorinated lime and Hydrogen Peroxide. **(10)**

Q6 Discuss the different properties of α, β and Y-rays. Give a detail note on the construction and working of G-M counter. **(10)**

Registration No : | | | | | | | | | | |

Total Number of Pages : 02

B. Pharm.
BP101T

1st Semester Regular / Back Examination: 2021-22
HUMAN ANATOMY AND PHYSIOLOGY-I
BRANCH(S): B.Pharma.
Time : 3 Hour
Max Marks : 75
Q.Code : OF592

Answer Question No.1 (Part-1) which is compulsory, any seven from Part-II and any two from Part-III.
The figures in the right hand margin indicate marks.

Part-I

Q1 **Answer the following questions :** **(2×10)**

a) Define homeostasis with an example.
b) Which cell organelle is called as suicide bags of cell and why?
c) Write the structure and functions of plasma membrane.
d) Define the term proximal and distal.
e) Write different bone cells and their functions.
f) Classify muscular tissue; and write their location and functions?
g) What is Electrocardiogram.
h) Write the functions of spleen.
i) Name the neurotransmitters released from preganglionic and postganglionic sympathetic nerve endings.
j) What are the antigens and antibodies present in A+ blood group?

Part-II

Q2 **Focused-Short Answer Type Questions- (Answer Any Seven)** **(5×7)**

a) Define tissue. Discuss details about epithelial tissue.
b) Write the principles of cell communication.
c) Describe details about Lymph nodes.
d) Write notes on neuromuscular junction.
e) Classify the bones and describe the microscopic structure of bone.
f) Write the structure and functions of human eye.
g) Write the structure and functions of skin.
h) Write the origin and functions of cranial nerves.
i) Describe the composition and functions of blood.

Part-III

Long Answer Type Questions (Answer Any Two)

Q3 a) Discuss the human cell with neat and labeled diagram. **(5)**
b) Explain briefly the structure and functions of different cell organelles. **(5)**

Q4 Describe details about the followings:
a) Bones of Thoracic cage **(5)**
b) Synovial joints **(5)**

Q5 Write short notes on:

a) Mechanism of blood coagulation **(5)**

b) Blood group and its significance in clinical practice. **(5)**

Q6 a) Describe human heart with a neat and labelled diagram. **(5)**

b) Write a detail notes on Cardiac cycle. **(5)**

Registration No: -

Total Number of Pages:01	KMIPS-251	B.PHARM	Sub Code: BP106RMT

1st Semester Regular / Back Non University Examination: 2021-2022

SUB: REMEDIAL MATHEMATICS – THEORY

BRANCH: B.PHARMA

Max Marks: 35 Time: 2 Hours

Answer any five from Part-I and any one from Part-II.

The figures in the right hand margin indicate marks.

	Part- I	
Q1	Only Focused-Short Answer Type Questions- (Answer Any Five out of Seven)	(05x05)
a)	Evaluate $\begin{vmatrix} 5 & 3 & 2 \\ 4 & 2 & 1 \\ 5 & 6 & 7 \end{vmatrix}$	(5)
b)	Find equation of straight line passing through (2,-5) and (3,7)	(5)
c)	Find Equation of straight line whose sum of intercept is 7 and passing through (1,-1)	(5)
d)	Find $\frac{dy}{dx}$ if $x^y = x^3 + 2\sin x$	(5)
e)	Find $\frac{dy}{dx}$ if $x^3 + y^3 + xy = 0$	(5)
f)	Evaluate $\lim_{x-o} \frac{sin5x}{cox7x}$	(5)
g)	Integrate $\int (x^3 + \cos x + e^x) dx$	(5)
	Part-II	
	Only Long Answer Type Questions (Answer Any One out of Two)	(01X10)
Q2	Prove that $\begin{vmatrix} a+1 & 1 & 1 \\ 1 & b+1 & 1 \\ 1 & 1 & c+1 \end{vmatrix} = abc(1+\frac{1}{a}+\frac{1}{b}+\frac{1}{c})$	(10)
Q3	Find the inverse matrix of the matrix $A = \begin{bmatrix} 2 & 5 & 1 \\ 3 & 1 & 4 \\ 1 & 3 & 2 \end{bmatrix}$	(10)

Registration No: -

Total Number of Pages:01	KMIPS-251	B.PHARM	Sub Code: BP106RBT
1st Semester Regular / Back Non University Examination: 2021-2022			
SUB: REMEDIAL BIOLOGY– THEORY			
BRANCH: B.PHARMA			
Max Marks: 35		Time: 2 Hours	
Answer any five from Part-I and any one from Part-II.			
The figures in the right hand margin indicate marks.			
	Part- I		
Q1	Only Focused-Short Answer Type Questions- (Answer Any Five out of Seven)		(05x05)
a)	Write a comparative study on Spermatogenesis and Oogenesis.		(5)
b)	Explain the process of urine formation.		(5)
c)	Highlight the various steps involved in Krebs cycle.		(5)
d)	Discuss the mechanism of Renin-Angiotensin-Aldosterone system in GFR regulation.		(5)
e)	Explain the mechanism of breathing and its regulation.		(5)
f)	Explain the kingdom Monera and Animalia with features and classification.		(5)
g)	Mention the types of tissue. Write about the epithelial tissue and its different layers.		(5)
	Part-II		
	Only Long Answer Type Questions (Answer Any One out of Two)		(01X10)
Q2	Illustrate comparative study on physiological effects of ANS and spinal cord.		(10)
Q3	Explain the entire phases involved in Calvin cycle and Hatch-Slack cycle.		(10)