Enrollment No……

Bachelor of Pharmacy

First Semester Main Examination, Dec-2020

Human Anatomy and Physiology-I [BP101T]

Time: 3:00 Hrs **Max Marks 75**

Note: (1) All parts of the question paper are compulsory.

(2) All questions of each part to be attempt at one place.

(3) Draw neat and labeled diagram wherever necessary.

Part-A [1×20=20]

Note : Attempt all the questions. Each question carries 1 mark.

Q.1 Multiple choice questions.

(i) In which part of an eye a pigment is present which is responsible for brown, blue or black eyes?

(a) Cornea (b) Choroid

(c) Iris (d) Vitreous Body

(ii) The study of joints is known as _____

(a) Archaeology (b) Osteology

(c) Syndesmology (d) Arthrology

(iii) Name the tissues that are involved in the formation of membranes.

(a) Epithelial tissue (b) Nervous tissue

(c) Muscular tissue (d) Connective tissue

(iv) What is the name of the tissues which helps in protection and support of the body?

(a) Muscular tissue (b) Nervous tissue

(c) Connective tissue (d) Epithelial tissue

(v) Name the tissues which detect changes inside and outside the body and respond by action potential?

(a) Epithelial tissue (b) Connective tissue

(c) Muscular tissue (d) Nervous tissue

(vi) Name the gland which controls blood pressure?

(a) Thalamus Gland (b) Adrenal Gland

(c) Thyroid Gland (d) Pancreas Gland

(vii) The renewal of skin is a good thing, because of skin sheds approximately 50 million cells

(a) Every second (b) Every day
(c) Every minute (d) Every week

(viii) The synovial joint are also known as _____

(a) Megablast (b) Periosteum
(c) Diarthrosis (d) Arthrois

(ix) Which of the following tissues helps in the movement of body structure?

(a) Nervous tissue (b) Muscular tissue
(c) Epithelial tissue (d) Connective tissue

(x) In which organ of the human body are the lymphocytes cells formed?

(a) Liver (b) Bone Marrow
(c) Pancreas (d) Spleen

(xi) The outermost part of the skin that is waterproof is known as

(a) Dermis (b) Receptors
(c) Sensory cell (d) Epidermis

(xii) Which of the following disease is associated with joints?

(a) Gout (b) Osteoporosis
(c) Arthritis (d) Tetany

(xiii) Group of cells, which is similar in structure and function are structured into_____

(a) Organ System (b) Muscles
(c) Bone (d) Tissues

(xiv) Hinge joint is present between _____ and _____

(a) Femur and ulna (b) Humerus and ulna
(c) Femur and pectoral girdle (d) Femur and pelvic girdle

(xv) A human disorder cretinism is caused due to the under secretion of:

(a) Adrenalin hormone (b) Cortisone hormone
(c) Glucagon hormone (d) Thyroxin hormone

(xvi) Which of the following does not belong to the class of covering and lining epithelium?

(a) Simple squamous epithelium (b) Glandular epithelium
(c) Simple cuboidal (d) Simple columnar

(xvii) Which cartilage is present at the joints of long bones?
(a) Calcified (b) Elastic
(c) Hyaline (d) Fibrous

(xviii) Name the epithelium which consists of two or more than two layers of cells that protect the core tissues?
(a) Pseudo stratified columnar epithelium
(b) Simple columnar epithelium
(c) Stratified epithelium
(d) Simple cuboidal epithelium

(xix) Which of the following is the simplest amino acid?
(a) Glycine (b) Alanine
(c) Aspergine (d) Tyrosine

(xx) The layer under the epidermis that contains connective tissue, hair follicles, sweat glands and nerve endings is known as
(a) Pore (b) Dermis
(c) Receptors (d) Sensory cell

Part-B [2×10=20 Marks]

Long Answer type Question:-

Note : Attempt any two questions. Each question carry 10 mark.

Q.1 Explain the blood clotting mechanism with the factors and write a note on blood group.

Q.2 Explain connective and nervous tissues

Q.3 Write a brief accommodation of eye balls.

Part-C [5×7=35 Marks]

Short Answer type Question:-

Note : Attempt any seven questions. Each question carry 5 mark.

Q.1 Discuss about anatomy and physiology of human body and explain the basic life processes.

Q.2 Write short note on Homeostasis.

Q.3 Explain the structure and function of epithelial tissue.

Q.4 Explain cells. Define structure and function of cells.

Q.5 Differentiate between cardiac and smooth muscles.

Q.6 Describe in detail level of structural organization of human body.

Q.7 Write the classification and Properties of nerve fibers.

Q.8 Define basic anatomical terminology and scope of anatomy and physiology.

Enrollment No……

Bachelor of Pharmacy

First Semester Main Examination, Dec-2020

Pharmaceutical Analysis-I [BP102T]

Time: 3:00 Hrs **Max Marks 75**

Note: - (1) All parts of the question paper are compulsory.

(2) All questions of each part to be attempt at one place.

Part-A

Q.1 Multiple Choice Questions - [1x20 = 20 Marks]

(i) Which is not compleometric indicator?
(a) Mordant black II (b) Murexide
(c) Xylenol orange (d) Methyl orange

(ii) What will be the pH at the equivalence point in the titration of a weak acid and a strong base?
(a) 0 (b) >7
(c) 7 (d) <7

(iii) On adding a large amount of titrant, an asymptote is obtained in the titration curve, this asymptote represents
(a) K_a of the initial solution (b) pH of the initial solution
(c) pH of the titrant (d) none of the above

(iv) The buffer region is represented by
(a) The concave curve after adding titrant
(b) The flat curve before the equivalence point
(c) The flat curve after the equivalence point
(d) The steep curve after the equivalence point

(v) Which one of the following is direct method of precipitation titration?
(a) Mohr's method (b) Volhards method
(c) Kjeldahl method (d) Diazotization method

(vi) The pH range of methyl orange as an indicator is
(a) 3-5 (b) 8-9
(c) 2-4 (d) 6-8

(vii) The amount of NaOH used in the titration of 100 ml 0.1 N HCl is
(a) 4 g (b) 0.04 g
(c) 2 g (d) 0.4 g

(viii) The equivalent weight of an acid can be calculated by
(a) Molecular weight × basicity
(b) Molecular weight/basicity
(c) Molecular weight × acidity
(d) Molecular weight/acidity

(ix) The normal rain water is acidic due to
(a) SO_2 (b) NO_2 (c) NH_3 (d) CO_2

(x) Which of the following represents the equivalence point in the graph of pH Vs volume of titrant?
(a) Point at the highest pH
(b) Point at the greatest magnitude of the slope of the curve
(c) Point at the lowest pH
(d) Point at the least magnitude of the slope of the curve

(xi) Conductometric titration of HCL and NaoH will give you
(a) S-shape curve (b) V-shape curve
(c) Dum belled shape curve (d) L-shape curve

(xii) The apparatus used in measurement of conductance is
(a) Precipitation titration
(b) Complex formation titration
(c) Displacement Titration
(d) Very weak acid and Strong base Titration

(xiii) The titration of sodium acetate Vs HCL is categories as
(a) Potentiometer (b) Wheatstone circuit
(c) Conductivity cell (d) Golay cell

(xiv) The concentration of ----------affect iodometric titrations.
(a) Alcohol (b) Saturated organic acid
(c) Both a and b (d) Only b

(xv) The theory of conductrometry is mainly based on
(a) Ohms Law (b) Faraday Law
(c) Beers Lambert's law (d) Ostawald Dilution Law

(xvi) In conductivity cell, the following electrode is used -
(a) Glass electrode (b) Caromel electrode
(c) Platinum electrode (d) DME

(xvii) Conductivity is a-

(a) Additional property (b) Constitutive property
(c) Colimetery property (d) Both a and b

(xviii) In potentiometry _____is measured using_____instrument

(a) pH, potentiometer
(b) Conductivity , conductometer
(c) Optical rotation , polarimeter
(d) Current , potentiometer

(xix) The inner side of glass electrode is filled with-

(a) 0.1 N HCL (b) 01N HCL
(c) 1M HCL (d) 0.1 N KCL

(xx) The standard potential of hydrogen electrode is

(a) 1 (b) 0 (c) 7 (d) 14

Part-B

Long answer questions. [2x10 = 20 Marks]

Note: Attempt any two questions. Each question carries 10 marks.

Q.1 Explain the following

(a) Standardization of 0.1 M Sodium hydroxide solution
(b) Iodometry and Iodimetry

Q.2 What is the theory of acid base titration and indicator? Explain the neutralization titration between acid and strong base.

Q.3 What is the principle of Polarography? Elaborate along with construction and working of dropping mercury electrode?

Part-C

Short answer questions [7x5 = 35 Marks]

Note : Attempt any 7 questions. Each question carries 5 marks.

Q.1 Explain different techniques of analysis?

Q.2 What is Non aqueous titration and write method of estimation of sodium benzoate?

Q.3 Give classification of complex metric titration and brief about conduct metric titrations?

Q.4 Write basic principles, methods and application of diazotization titration?

Q.5 Brief account on sources of Errors in pharmaceutical analysis?

Q.6 Give principles and applications of Redox titration. Detail account on Mohr's method with examples?

Q.7 Write the primary and secondary Standard.

Q.8 Write short notes on (any two)
(a) Normality and Molarity
(b) Standard and Reference
(c) Caromel electrode
(d) Co-precipitation and post precipitation

Enrollment No……

Bachelor of Pharmacy
First Semester Main Examination, Dec-2020
Pharmaceutics - I [BP103T]

Time: 3:00 Hrs **Max Marks 75**

Note: - (1) All parts of the question paper are compulsory.
(2) All question of each part to be attempt at one place.

Part-A

Q.1 Multiple Choice Questions. [1×20 = 20] Marks

(i) Third edition of IP was reconstituted under the chairmanship of-
(a) B.N. Ghosh
(b) B. Mukharji
(c) R.N. Chopra
(d) Nityanand

(ii) One pound (Lb) = _____ ounces in Apothecaries system.
(a) 16 (b) 12 (c) 8 (d) 20

(iii) The first edition of National Formulary of United States was published in_____ by American Pharmaceutical Association.
(a) 1975 (b) 1868 (c) 1820 (d) 1888

(iv) How many parts of solvent needed to dissolve slightly soluble solute ?
(a) 1 to 10 parts
(b) 10 to 100 parts
(c) 100 to 1000 parts
(d) 30 to 100 parts

(v) Homoeopathy was proposed by physician
(a) Samuel Hahnemann
(b) Hippocrates
(c) Dioscorides
(d) None of these

(vi) Full form of USP
(a) United State of pharmacopoeia
(b) United State of pharmacy
(c) Union State of portal
(d) United State of pharmacopeia

(vii) Following method used for formulation of emulsion
(a) Bottle method
(b) Wet gum method
(c) Dry gum method
(d) All of above

(viii) 'Principle of single remedy', is basic principle of _____ medicines
(a) Siddha
(b) Homoeopathy
(c) Unani
(d) None of above

(ix) 1 tablespoonful =
(a) 5ml (b) 10ml (c) 15ml (d) 20ml

(x) _____ method is used for determination of particle size
(a) Sieving
(b) sedimentation
(c) Optical microscopy
(d) All of above

(xi) _____ method is used for determination of particle size
(a) Sieving
(b) sedimentation
(c) Optical microscopy
(d) All of above

(xii) _____ factors affect rate of filtration.
(a) Area of filter surface
(b) Particle size
(c) Temperature
(d) All of above

(xiii) Surface treated glass is also called as _____
(a) Type I glass
(b) Type II glass
(c) Type III glass
(d) None of above

(xiv) Suspension is _____ liquid dosage forms.
(a) Monophasic
(b) Biphasic

(c) Both of above
(d) None of the above

(xv) One tea spoonful _____ ml.
(a) 4 (b) 8 (c) 15 (d) 30

(xvi) Planetary mixer is used for mixing of _____
(a) Solids
(b) Liquids
(c) Semisolids
(d) None of the above

(xvii) _____ is the mechanism of size reduction.
(a) Toughness
(b) Hardness
(c) Cutting
(d) None of above

(xviii) Starch can be used as _____ in tablet formulation.
(a) Binder
(b) Colouring agent
(c) Flavouring agent
(d) None of above

(xix) _____ is the method of preparation of granules.
(a) Wet granulation
(b) Dry granulation
(c) Both of above
(d) None of above

(xx) Roller mill works on the principle of _____
(a) Impact
(b) Compression
(c) Attrition
(d) None of above

Part-B

Long answer questions. [2×10 = 20] Marks

Note : Attempt any two questions. Each question carries 10 marks.

Q.1 Define the term Prescription. Discuss various parts of prescription giving suitable examples. What are the common errors in the prescription?

Q.2 What are semi-solid dosage forms? Give a detailed account on excipients used in semi-solid forms.

Q.3 Define and classify Emulsion. Discuss methods of preparation, stability problem and methods to overcome stability problems in emulsion.

Part-C

Short answer questions. [7×5 = 35] Marks

Note: Attempt all questions. Each question carries 5 marks.

Q.1 What are Liquid dosage forms? Discuss in detail various solubility enhancement techniques.

Q.2 Classify various pharmaceutical dosage forms with a detailed note on unit dosage forms. Write its applications over liquid dosage forms.

Q.3 Define the term Incompatibility. Describe various types of drugs incompatibilities giving suitable examples.

Q.4 What are suppositories and its types? Write a short note about molding method for preparation of suppositories.

Q.5 Difference between Lotion and Liniment, Syrups and Elixirs.

Q.6 Difference between Flocculated and Deflocculated suspension, Paste and Cream.

Q.7 Explain different types of Dosage form.

Q.8 Write short notes on any three of the following.
(i) Factors affecting Suspension
(ii) Pharmacy as a career.
(iii) Imperial and Metric system of calculation

Enrollment No……

Bachelor of Pharmacy
First Semester Main Examination, Dec-2020
Pharmaceutical Inorganic Chemistry [BP104T]

Time: 3:00 Hrs **Max Marks 75**

Note : (i) All parts of the question paper are compulsory.
(ii) All question of each part to be attempt at one place.

Part-A

Q.1 Multiple Choice Questions- [1x20 = 20 Marks]

(i) Dilute acid does not produce carbon dioxide on being treated with:-
(a) Marble (b) Lime
(c) Baking Soda (d) Lime Stone

(ii) Some fruits like mango, lemon, raw grapes, orange, etc., have a sour taste due to the presence of:
(a) Acetic acid (b) Citric acid
(c) Lactic acid (d) Oxalic acid

(iii) Brine is an -
(a) Aqueous solution of sodium hydroxide
(b) Aqueous solution of sodium carbonate
(c) Aqueous solution of sodium chloride
(d) Aqueous solution of sodium bicarbonate

(iv) In pharmaceutical preparations Zinc Sulphate is used as?-
(a) Astringent & Antiseptic (b) Antacid
(c) Antimicrobial & Preservative (d) All

(v) $Na_2CO_3 . 10H_2O$ is
(a) washing soda (b) baking soda
(c) bleaching powder (d) tartaric acid

(vi) Alkalis are -
(a) Acids, which are soluble in water
(b) Acids, which are insoluble in water
(c) Bases, which are insoluble in water
(d) Bases, which are soluble in water

(vii) Gutzeit method us used for the limit test of -
(a) Iron (b) Sulphate
(c) Chloride (d) Arsenic

(viii) The chemical formula of caustic soda is -
(a) $NaOH$ (b) $Ca(OH)_2$
(c) NH_4OH (d) KOH

(ix) Which gas is used as antioxidant?
(a) CO_2 (b) N_2O
(c) N_2 (d) O_2

(x) According to the IP, calamine is?
(a) Titanium Oxide (b) Zinc Oxide & 0.5% ferric oxide
(c) Magnesium Sulphate (d) Ferric Oxide

(xi) Which antacid is associated with Milk Alkali syndrome?
(a) $Mg(OH)_2$ (b) $NaHCO_3$
(c) $CaCO_3$ (d) $Al(OH)_3$

(xii) Agents used for Disinfection of Water -
(a) Bleaching Powder (b) Ozone
(c) Both (d) None

(xiii) Abrasive agent used in tooth powder is -
(a) SLS (b) Sodium CMC
(c) DE calcium Phosphate (d) Triclosan

(xiv) BAL is used in the Poisoning of?
(a) Arsenic (b) Iron
(c) Calcium (d) Copper

(xv) Agent used as Radio-opaque contrast media for X-ray examination of GIT?
(a) Barium Sulphate (b) Magnesium Sulphate
(c) Radioactive Iodine (d) Sodium Phosphate

(xvi) $FeSO_4$ is used as?
(a) Antacid (b) Hematinic
(c) Expectorant (d) Antioxidant

(xvii) Which is the Major Cation of Intracellular Fluid?
(a) Sodium (b) Potassium
(c) Calcium (d) Magnesium

(xviii) Alcohol concentrations above 60% are effective against _____
(a) Bacteria (b) Fungi
(c) Germs (d) Giruses

(xix) Impurities in pharmaceutical preparation may be due to following sources:
(a) Raw material (b) Manufacturing process
(c) Chemical instability (d) All of the above

(xx) Boric acid having _____ mol.wt
(a) 61.83 (b) 40.1 (c) 45 (d) 50

Part-B

Long answer questions. [10x2 = 20 Marks]

Note : Attempt any two questions. Each question carries 10 marks.

Q.1 Define impurities in pharmaceutical Substance. Write the source and types of impurities.

Q.2 Explain the principle involve in Limit test for arsenic with reactions.

Q.3 Write the function of physiological ions and role of oral rehydration salt.

Part-C

Short answer questions. [5x7 = 35 Marks]

Note : Attempt any seven questions. Each question carries 5 marks.

Q.1 Write the Definition of Poisons with example of antidote.

Q.2 Define Emetics with details on example.

Q.3 What is the role of fluoride in the treatment on dental caries.

Q.4 Explain the acid base theory.

Q.5 Define antacid and write the Properties of antacid with example.

Q.6 Define radiopharmaceuticals and write the properties of alpha, beta and Gama radiation.

Q.7 What is the role of Zinc Sulphate as an astringent?

Q.8 Define antimicrobial and explain about boric acid.