Enrollment No.....

Bachelor of Pharmacy
Seventh Semester Main Examination, December-2021
Pharmacy Practice [BP703T]

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) Primary care hospital has following all facility except -
(a) Emergency department
(b) Basic diagnostic service
(c) X- ray unit
(d) Disaster management team

(ii) Doppler ultrasound is used ..... -
(a) To view image of bone
(b) To view blood flow
(c) To view gram negative microorganism
(d) To view injuries of tissues

(iii) Following branches come under Head of clinical service except -
(a) Medicine
(b) Radiology
(c) Pathology
(d) Physiotherapy

(iv) Following facility should be observed by Head of pharmacy service except.
(a) Manufacturing
(b) Drug information services
(c) Medico legal services
(d) Therapeutic monitoring services

(v) Credit service of Hospital will be maintained by -
(a) Head clinical services
(b) Head Administrative services
(c) All of above
(d) None of above

(vi) Following are the function of the administration in hospital except-
(a) He excute overall police, rules, regulations in the hospital .
(b) He is responsible for smooth running of outpatient department .
(c) He prepares a budget for hospital
(d) He forms executive committee

(vii) Who will be available for 24 hrs service basis in hospital ?
(a) Residential medical staff
(b) Associate medical staff
(c) Consulting medical staff
(d) Honorary medical staff

(viii) Who is part time consulting staff in hospital ?
(a) Residential medical staff
(b) Associate medical staff
(c) Consulting medical staff
(d) Honorary medical staff

(ix) Who is part time consulting staff in hospital ?
(a) Residential medical staff (b) Associate medical staff
(c) Consulting medical staff (d) Honorary medical staff

(x) The basic principle of TDM is to measure ..... -
(a) Patient's blood drug concentration
(b) Limited role in drug toxicology
(c) Patient's wise drug concentration
(d) None of the above

(xi) _____drug having a narrow therapeutic window in TDM -
(a) Methotrexate (b) Phenytoin
(c) Theophylline (d) All of the above

(xii) Which are the Objectives of TDM
(a) To achieve optinal drug therapy
(b) To achieve desired pharmacological effect of a drug within shortest possible time with no toxicity
(c) To monitor serum drug concentration.
(d) All of the above

(xiii) Which are the criteria for drug in TDM-
(a) The drug should have a narrow Therapeutic indca
(b) Drug should display non linear pharmacokinetics
(c) There should b aba benefactor concentration respons relationship
(d) All of the above

(xiv) Digoxin is practical for -
(a) Rate control of atrial fibrillation
(b) For an inotropic effect in heart failure
(c) All of the above
(d) None of above

(xv) Cigarette smoking increases the hepatic clearance of -
(a) Clozapine (b) Theophylline
(c) Aspirin (d) Option "a" & "b" both

(xvi) Which one is Direct method of monitoring of patient medication history ?
(a) Laboratory detation of the presence of non toxic markers

(b) Pill count
(c) Prescription refill (d) Electronic containers

(xvii) Which are indirect methods for monitoring of patient medication history ?
(a) Measure blood or urine level of drugs (b) Pill count
(c) Electronic medication content (d) Option (b) & (c)

(xviii) What is advantages of triple vaccine ?
(a) Improved compliance (b) Ease of administration
(c) Synergistic effect (d) Decreased adverse effect

(xix) Pharmacokinetic drug interaction during adsorption is due to ..... -
(a) Alteration of g.i, tract function (b) Alteration of g,i, trat content
(c) Options (a) & (b) (d) None of the above

(xx) Drug interaction between phenytoin & warfarin is example of drug interaction during ..... ?
(a) Absorption (b) Distribution
(c) Metabolism (d) Excretion

Part-B

Long answer questions. [10x2 = 20 Marks]
Note : Attempt any two questions. Each question carries 10 marks.

Q.1 What are requirements to become a hospital pharmacist? Discuss the organization of hospital pharmacy in detail.

Q.2 Explain Inventory Describe various inventory control principles and purchase procedures .

Q.3 Discuss the various types of drug distribution systems for In-patient in hospital? Describe importance of therapeutic drug monitoring .

Part-C

Short answer questions. [5x7 = 35 Marks]
Note : Attempt all questions. Each question carries 5 marks.

Q.1 Write note on Inpatient & and out patient prescription .

Q.2 Explain the role of pharmacist in medication adherence .

Q.3 What are different contents of Hospital formulary.

Q.4 Describe different legal requirements for prescribed medication order .

Q.5 Explain the functions & responsibilities of clinical pharmacist.

Q.6 Explain the term idiosyncrasy .

Q.7 Explain the following (Any two)
(a) Structure of wholesale drug store (b) Rational use of OTC medication
(c) Structure of retail drug store

Enrollment No.....

Bachelor of Pharmacy

Seventh Semester Main Examination, December-2021

Novel Drug Delivery System –Theory [BP704T]

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) ---------- is are example of a synthetic biodegradable polymer -
(a) Acroline
(b) Polyethylene glycol
(c) LPDE
(d) Polystyrenes

(ii) Eudraget L100 is a types of -
(a) Cellulose polymers
(b) Vinyl copolymer
(c) Methocartiacid copolymer
(d) Metha cylic acid copolymer

(iii) The stratuen conium consist of ---------- layers of Keratinized cells -
(a) 10 to 25
(b) 0 to 10
(c) 25 to 50
(d) Above 50

(iv) Webels model in used for evaluation of-
(a) Pulinonary lar
(b) Nasal Targeting
(c) Hepatic Targeting
(d) Ocular targeting

(v) Following in the example of invasive brain targeting -
(a) Neosome
(b) Colloidal caniers
(c) Amino acid transported
(d) osmogenes

(vi) ---------- is carrier for Hemoglobin -
(a) Neosome
(b) Nanoparticle
(c) Aqua Some
(d) Phytosomes

(vii) Chitosan is a ---------- mucoadherive polymer -
(a) Polycaprolactne
(b) Poly lactic acid
(c) Poly styrene
(d) Alginate

(viii) A microcapsule has -
(a) Drug dispersed in matrix
(b) Drug core surrounded by distinct wall
(c) Drug absorbed on the surface
(d) Drug distributed in polymer matrix

(ix) ---------- is a dispersed matrix system -
(a) Navorpher (b) Nanoparticles
(c) Nanocapsules (d) Navopolymer

(x) Excipient to increase density of GRDDs is -
(a) ZnO (b) Talc
(c) $NaHCO_3$ (d) $CaCO_3$

(xi) One method to prepare nauoptaticle is -
(a) Pan Coating (b) Filtration
(c) Solubilisation (d) Precipitation

(xii) Drug release from osmotic drug delivery system depends on -
(a) Osmotic pressure (b) Ionic straight
(c) Osmotic pressure & ionic straight (d) Osmotic pressure senvironment

(xiii) The anterior part of these naralcavatiy opening to words the face -
(a) Nasopharyace (b) Nasal septum
(c) Nasal vestibule (d) Nasal turbinate

(xiv) The size of particle in a parenteral surpenion should be -
(a) 10 to 20 μ_m (b) less than 10 μ_m
(c) 100 to 200 μ_m (d) 50 to 100 μ_m

(xv) "Transdermiscup" in used in the treatment of -
(a) Hyper turion (b) Angina
(c) Motion sickenss (d) Anti dot for smoking

(xvi) Which of the following does not constitute as append agel route
(a) Sweat glands (b) Hairfollice
(c) Sebaceaus gland (d) Stratum corneum

(xvii) An Ocular device that has the shape of a flag
(a) Ocusert (b) Cacrisert
(c) NODS (d) SODS

(xviii) A spherical solid lipid pertacles prepared from physiological lipid dispersed in water on in aqueous surfactant solution.
(a) Solid lipid nanoparticle (b) Liposmes
(c) Nanosomic (d) Nanoparticles

(xix) The polymer used in "laciest Nanoparticles " -
(a) Hydroxyl ethyl cellulose (b) Hydroxyl methyl cellulose
(c) Methyl cellulose (d) Hydroxyl propyl cellulose

(xx) A prominent structure for ocular absorption of drug

(a) Conjunctiva (b) Choroid

(c) Sclera (d) Cornea

Part-B

Long answer questions. [10x2 = 20 Marks]

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

Q.1 Explain intra ocular barrier & methods to over came then.

Q.2 What are microspheres? Describe types & detail about its suspension technique with diagram.

Q.3 Explain the mechanism of controlled drug release -

Part-C

Short answer questions. [5x7 = 35 Marks]

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

Q.1 Classify polymers? Describe classification , properties formulation application of polymers .

Q.2 Give in detail, principle of bio adhesion & formulation consideration of buccal delivery system .

Q.3 Explain the concepts of liposomes & its application.

Q.4 Give the basic concepts of transdermal drug delivery system.

Q.5 Describe the formulation of Inhalers.

Q.6 Give introduction properties of implants & Osmotic pumps.

Q.7 What short note on (Any two).

(i) Intrauterine device

(ii) Monoclonal anti bodies

(iii) Nebulizers

(iv) Ocurests

Enrollment No.....

Bachelor of Pharmacy

Seventh Semester Main Examination, December-2021

Instrumental Methods of Analysis [BP701T]

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) _____ is a process of re-emission of radiant energy aborbed in the form of visible light-
(a) Fluorescence
(b) Spectroscopy
(c) Chromatography
(d) None of these

(ii) In Fluorescence, the light emitted is always of _____ wavelength than that absorbed -
(a) Shorter (b) Higher
(c) Equal (d) None of these

(iii) In Fluorescence, absorption and emission of light taken place in _____time -
(a) Very large time (b) Very short time
(c) Both of the above (d) None of the above

(iv) A molecule at rest or in ground stats has energy level/levels which is/are-
(a) Rotational
(b) Vibrational
(c) Electronic
(d) All of the above

(v) The energy emitted from triplet state to vibrational ground level is called -
(a) Fluorescence (b) Phosphorescence
(c) Absorbance (d) None of the above

(vi) Electron withdrawing groups _____ Fluorescence-
(a) Diminishes
(b) Increases
(c) Raises
(d) None of the above

(vii) Electron withdrawing groups/groups is/ are-
(a) Capital (b) $-NO_2$
(c) Cl & Br (d) All of the above

(viii) Factor/factors affecting Fluorescence is/are -
(a) Concentration of substance
(b) Oxygen, photodecomposition and pH
(c) Temperature & viscosity of impieties and other substance
(d) All of the above

(ix) An instrument used for measuring Fluorescence is called as _____ -
(a) Fluorescence (b) Flame photometer
(c) Fluorimeter (d) None of the above

(x) L/n filter fluorimeter _____filter / filters are used. -
(a) One
(b) Two
(c) Three
(d) Four

(xi) In fluorimeter ---------- is required as a source of illumination -
(a) Ordinary-light (b) Beam
(c) Uv light (d) None of the above

(xii) In fluorimeter the radiation from the sources is collected on ---------- -
(a) Cuvette
(b) Filters
(c) Lenses
(d) None of the above

(xiii) In fluorimeter the signals from detector are fed to the read out meter which is a ---------- -
(a) Galvanometer (b) Lences
(c) Cuvette (d) Filter

(xiv) Non fluorescent substances can be converted into fluorogenio by ---------- -
(a) Physical Change (b) Chemical Change
(c) Simple modification (d) Nothing

(xv) Sources of radiant energy in UV- visible spectrophotometer should -
(a) Stable and show no fluctuation
(b) Provide incident light of sufficient intensity
(c) Emit a continuous spectrum of high and uniform intensity
(d) All of the above

(xvi) Most common source/sources of UV radiation is/are -
(a) Hydrogen lamp
(b) Deuterium lamp
(c) Both of the above
(d) None of the above

(xvii) In UV- visible spectrophotometry the radiation emitted by the sources is collimated by -
(a) Lences
(b) Mirrors
(c) Slits
(d) All of the above

(xviii) Prism made up from ---------- are used in invisible region -
(a) Fused silica
(b) Quartz
(c) Glass
(d) None of the above

(xix) In Spectrophotometer mirror are used to ---------- light beqms -
(a) Reflect (b) Focus
(c) Collimate (d) All of the above

(xx) As per gelatin filter which statement is true-
(a) IC is manufactured from themn gelatin sheet
(b) Thin sheets of it transmit 10-30 mm band of wavelength
(c) Gelatin filters are now a days outdated
(d) All of the above

Part-B

Long answer questions. [10x2 = 20 Marks]

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

Q.1 What is the role of electrum transmission in UV spectroscopy ? Discuss the instrumentation & its application in pharmaceutical industry.

Q.2 What types of Injector, pump & detector system are used in HPLC? Enlist its pharmaceutical importance .

Q.3 Discuss the fundamental mode of Vibration is polyatomic molecules. Explain types of solvents & sample landing techiniques used in IR spectroscopy.

Part-C

Short answer questions. [5x7 = 35 Marks]

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

Q.1 Explain Gel chromatography.

Q.2 Explain Electrophoresis .

Q.3 Explain Paper chromatography.

Q.4 Explain Flame Photometry .

Q.5 Explain singlet, doublet and triplet state .

Q.6 Explain Fluorimetry.

Q.7 Short note on any two.
(i) Principle of UV visible spectroscopy
(ii) Factor affecting Fluorescence
(iii) Gas chromatography

Q.8 Explain HPTLC.

Enrollment No.....

Bachelor of Pharmacy
Seventh Semester Main Examination, December-2021
Industrial Pharmacy-II [BP702T]

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) What the term scale up means-
(a) Increasing batch size
(b) Decreasing batch size
(c) Increasing production rate
(d) Increasing quality of batch

(ii) What the term scale down means -
(a) Increasing batch size
(b) Decreasing batch size
(c) Increasing quality of batch
(d) Increasing production rate

(iii) Para meters to be considered for scale up of fluidized Bed Dryer -
(a) Optimum
(b) Air flow rate
(c) Inlet Air Temperature &humidity of the in coming Air
(d) All of above

(iv) Empty Gelation capsule have recommended storage condition at-
(a) 15 to 25° c
(b) 05 to 25° c
(c) 15 to 35° c
(d) 05 to 10° c

(v) State the other name of dry Granulation-
(a) Mixing
(b) Reduction
(c) Slugging
(d) Blending

(vi) Which of the following is part of Pilot plant operation-
(a) Validation
(b) Training
(c) Process & manufacturing Activity
(d) All of above

(vii) Technology transfer is----------
(a) Partial commercialization
(b) Full scale commercialization

(c) Regulatory requirement (d) Just a piece of document

(viii) Technology transfer is -
(a) Purpose oriented
(b) Process oriented
(c) Technology oriented
(d) Commenicial oriented

(ix) Types of TT involver-
(a) Vertical (b) Horizontal
(c) A & B both (d) None

(x) Qualification is-
(a) Regulatory requirement (b) Process based approach
(c) Verification of quality (d) Documented verification

(xi) Parameter of Drug regulatory affairs-
(a) Design (b) National laws
(c) construction (d) All of above

(xii) Name of Regulatory Authority of USA-
(a) FDA (b) CDSSO
(c) TGA (d) MHRA

(xiii) .....is the Regulatory Authority of India -
(a) EMEA (b) CD.SCO
(c) MPA (d) MH.RA

(xiv) WTO stands for-
(a) World trade organization
(b) World teaching organization
(c) Work trade office
(d) None of above

(xv) .....No of studies performed in Non clinical drug development-
(a) 2
(b) 5
(c) 3
(d) 4

(xvi) AMDA is applicable for-
(a) New drug
(b) Generic drug
(c) Both

(d) None

(xvii) NDA taken-
(a) 12-15 years
(b) 15-20 years
(c) 10-12 years
(d) 5-18 years

(xviii) MHRA is regulatory authority of -
(a) India
(b) USA
(c) UK
(d) Australia

(xix) Phase-I of clinical trials needs-
(a) More than 1000
(b) 100-1000
(c) fewer than 100
(d) 10-30 healthy Volunteers

(xx) Phase II of clinical traials needs-
(a) More than 1000
(b) 100-1000
(c) fewer than 100
(d) 10-30 healthy Volunteers

Part-B

Long answer questions. [10x2 = 20 Marks]

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

Q.1 Explain if brief pilot plant technique.

Q.2 Explain WHO guideline for technology transfer in short .

Q.3 What are the different Regulatory Authority? Discuss the role of Regulatory affairs department& pesonsibility Regulatory affairs professionals .

Part-C

Short answer questions. [5x7 = 35 Marks]

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

Q.1 Describe the Responsibilities & function of CDSCO.

Q.2 Explain the procedure for pilot plant scale up for tablet.

Q.3 A detailed note on QMS.

Q.4 Discuss general consideration of Investigational New Drug (IND) Application & Clinical Research protocol.

Q.5 What is GLP? Write principles in detail ?

Q.6 What is NABL Accreditation? Why it is important? What are its scope in pharmacy .

Q.7 Write a short note on (any 2)
(a) QMS
(b) TQM
(c) Six sigma