

Bachelor of Pharmacy
Fifth Semester Main Examination, December 2021
Pharmacology-II [BP503T]

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) Which of the following are properties of heart
(a) Automaticity (b) Conductivity
(c) Rhythmicity (d) All of the above
- (ii) In " Congesting heart failure " what are the main disability of heart
(a) Force of contraction (b) Overfilling of blood
(c) Increase in blood pressure (d) Both A and B
- (iii) Digoxin mainly used in the treatment of fallowing.
(a) Hypertension (b) Angina
(c) Arrhythmia (d) CHF
- (iv) What is the normal blood pressure.
(a) 120/80 (b) 80/120
(c) 120 Diastolic and 80 systolic (d) 120 to 80
- (v) Which of the following d13 order 13 generally considered as "silent killer" .
(a) Hypertension (b) Angina
(c) Arrhythmia (d) All of the above
- (vi) Which of the following is homoeostas mechanism for hypertension ?
(a) Renin – angiotensin aldosterem systems
(b) Baroreceptor system
(c) Negative and positive feed back machine
(d) All of the above
- (vii) Renin is secreted from
(a) Kidney (b) lungs
(c) Stomach (d) liner
- (viii) Nitric oxide is -
(a) Vasodilator (b) Vaso constrictor
(c) Both (d) None

- (ix) Angina is characterized by
 (a) left side chest pain (b) Right side chest pain
 (c) Stomach pain (d) All
- (x) For fast acting nitro –glycerin should be given by .
 (a) Oral (b) Sublingual
 (c) Buccal (d) Intravenous
- (xi) Which of the following is cause of arrhythmia .
 (a) Re-entry (b) Unidirectional block
 (c) abnormal cardiac impulse generalism (d) All of the above
- (xii) Which of the following drug is an example of class IA Antiarrhythmic drug.
 (a) Quinidine (b) Anti platelet
 (c) paracetamol (d) Lidocaine
- (xiii) Which of the following is beneficial for CVS system.
 (a) LDL (b) HDL
 (c) VLDL (d) Telmisartan
- (xiv) Which the following is an example of direct rennin inhibitor
 (a) Aliskiren (b) Captopril
 (c) Enalapril (d) Telmisartan
- (xv) Which of the following is known as "Good cholesterol "
 (a) LDL (b) VLDL
 (c) HDL (d) Chylomicron
- (xvi) Which of the following has minimum size for Atherogenicity
 (a) LDL (b) VLDL
 (c) HDL (d) Chylomicron
- (xvii) HDL is responsible for -
 (a) Transport of lipid from liver to peripheral tissue
 (b) Transport of lipid from peripheral tissue
 (c) From intestine to liver
 (d) From liver to intestine
- (xviii) VLDL is synthesized in
 (a) Liver (b) Intestine
 (c) Stomach (d) Pancreas

- (xix) Histamine exerts the following actions except
(a) Dilation of large blood vessels
(b) dilation of small blood vessels
(c) stimulation of isolated Guineapig heart
(d) Itching
- (xx) Fall in blood pressure caused by larger doses of Histamine is blocked by
(a) H₁ antihistamines alone
(b) H₂ antagonists alone
(c) combination of H₁ and the antagonists
(d) None 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 steroids ? Write down an androgens and anabolic steroids.
- Q.2 Classification mechanism of action and therapeutic effects, clinical uses , side effects and contra indication of anti hypertensive drugs.
- Q.3 Classification mechanism of action and clinical uses and side effects of anti-anginal drugs.

Part-C

Short answer questions.

[7x5 = 35 Marks]

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

- Q.1 Write down an drugs used in the therapy of shock.
- Q.2 Short note on fibrinolytic and anti-platelet drugs.
- Q.3 Short note on plasma volume expanders.
- Q.4 Describe thyroid hormones.
- Q.5 Describe the ACTH and corticosteroids. .
- Q.6 Describe prosta glandins and lenkotrienes.
- Q.7 Short note on Anterior pituitary hormones.
- Q.8 Short note on hematinics, coagulant and anti coagulants.

Bachelor of Pharmacy
Fifth Semester Main Examination, December 2021
Pharmacognosy & Phytochemistry-II [BP504T]

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) Which of the following is not an amino acid
 (a) Glutamic acid (b) Aspartic acid
 (c) Glutamic (d) Palmitic acid
- (ii) What type of covalent bonds link the amino acids in a protein -
 (a) Peptide bonds (b) hydrogen bonds
 (c) ionic bonds (d) Glycosidic bonds
- (iii) Which of the followings is an amino acid that is found in proteins ?
 (a) adenosine (b) Adenine
 (c) alanine (d) linoleic acid
- (iv) Which of the following factors can affect enzyme activity ?
 (a) Temperature (b) PH
 (c) The presence of certain metal ions. (d) All of the above
- (v) In a double stranded molecular of DNA the ratio of purines and pyrimidines is -
 (a) Variable
 (b) determined by the base sequence in RNA
 (c) Genetically determined
 (d) always 1:1
- (vi) Keller kohlner test is used to identify
 (a) Gito.xin (b) Sugar digitoxone
 (c) Digitoxin (d) Digtogenin
- (vii) apocynaceae is not family of -
 (a) Venca (b) Rauwolfia
 (c) Bella donna (d) None of these
- (viii) Cinnamon belongs to family -
 (a) Umbelliferae (b) solonaciae
 (c) Labiatae (d) Lauraceae

- (ix) Tannins precipitates
 (a) Proteins (b) Sugars
 (c) Starch (d) Resins
- (x) Hemolytic test is identification test for
 (a) Sponin glyceride (b) cynogenetic glycoside
 (c) cardiac glycoside (d) phenol glycoside
- (xi) Curcumin belongs to family
 (a) Rubiaceae (b) Burseraceae
 (c) Zingiberaceae (d) Liliaceae
- (xii) caffeine is obtained from -
 (a) Coca beavers (b) Cola huts
 (c) Tea (d) All
- (xiii) glycyrrhetic acid is -
 (a) resin (b) Terpenoid
 (c) Alkaloid (d) tannin
- (xiv) Artemisin is mainly used as -
 (a) Anti inflammatory (b) Antioxidant
 (c) Antimalarial (d) none
- (xv) vincristine & vinblastine are obtained from the plant
 (a) Catharanthus roseus (b) Atropa belladonna
 (c) Plectranthus barbatus (d) Taxus brevifolia
- (xvi) Sennosides are used as
 (a) cardiogenic (b) laxative & purgative
 (c) Diarrhoea (d) Arthritis
- (xvii) cassia angustifolia belongs to the family -
 (a) Liliaceae (b) Papaveraceae
 (c) Leguminosae (d) Posaceae
- (xviii) mayer's test can be used for the detection of
 (a) Alkaloids (b) Glycoside
 (c) Phenols (d) Tannins
- (xix) High performance liquid chromatography (HPLC)
 (a) identify the various separate leaf pigments
 (b) Separate organic pesticide
 (c) determine the caffeine content in coffee samples
 (d) determine the mercury content in a fish sample

- (xx) starting compound used for the chemical synthesis of etoposide & terpenoids is
- | | |
|---------------------|-----------------|
| (a) Atropine | (b) vincristine |
| (c) Podophyllotoxin | (d) Taxol |

Part-B

Long answer questions

[10x2 = 20 Marks]

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

- Q.1 Explain about basic metabolic pathways and formation of secondary metabolites through shikimic acid pathway.
- Q.2 Explain different methods of extraction & isolation of alkaloids ?
- Q.3 Discuss in detail about the estimation. & utilization of caffeine.

Part-C

Short answer questions.

[7x5 = 35 Marks]

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

- Q.1 What are basic metabolic pathway ? Explain their importance
- Q.2 Explain the role of radioisotoper in the identification.
- Q.3 Write in detail about anti hypertensive drug ?
- Q.4 Write biological source chemical constituents and uses of cinnamon. Clove, coriander
- Q.5 Explain isolation method of reserpine ?.
- Q.6 Write the structure, production & utilization of atropine.
- Q.7 Write short note on (any 2)
- | | | |
|-------|----------|----------------------------|
| i) IR | ii) HPLC | iii) Ctwonn chromatography |
|-------|----------|----------------------------|

Bachelor of Pharmacy
Fifth Semester Main Examination, December 2021
Medicinal Chemistry-II [BP501T]

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

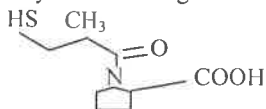
Q.1 Multiple Choice Questions.

[1×20=20]

- (i) Which one is the amino benzoic acid derivatives .
(a) Diprondion (b) Benzocaine
(c) Cocaine (d) Hexylcaine
- (ii) Lidocaine hydrochloride is -
(a) Anti anthric drugs (b) Anti hypertensive drugs
(c) Coagulant (d) Anti coagulant
- (iii) Which of the following belongs to sulfonyl wears ?
(a) Tolbutamide (b) Metformin
(c) Voglibose (d) Repaglinide
- (iv) Heterogenous mixtures of fattyacid and alcohol that are present in the body is .
(a) Lipid (b) Protein
(c) Carbohydrate (d) Glucose
- (v) According to methimazole, cored statement is.
(a) It is used to treat hyperthyroidism
(b) It is also known as thiamazole
(c) It is also taken before thyroid Surgery
(d) All of the above
- (vi) Drugs used for erectile dysfunction are.
(a) Sildenafil and tadalafil (b) L – Thyroxine and L- Thyroxine
(c) Norgestrel and levonorgestrel (d) None of the above
- (vii) Dibucaine is also known as.
(a) Dolbicaïne (b) Cinchocaine
(c) Both of the above (d) None of the above
- (viii) Chemical formula of warfarin is .
(a) C₁₉H₁₃O₄ (b) C₁₅H₁₆O₄
(c) C₁₉H₁₆O₄ (d) C₁₉H₁₃O₂

- (ix) Clofibrate is
 (a) Anti arrhythmic drugs (b) Anti- hyperlipidemic agents
 (c) Vasodilator (d) Anticoagulant
- (x) Tetra Caine is also called -
 (a) Pento caine (b) Dialcaine
 (c) Amethocaine (d) None of the above
- (xi) Drug that block the sensation of pain in the region where they are administered is -
 (a) Anti-arrhythmic drugs (b) Antidiabetic agents
 (c) Anti thyroid drugs (d) Local anaesthetizes
- (xii) Any drug when introduce into the body increases the output of sodium is -
 (a) Naturistic agent (b) Anti angina agents
 (c) Coagulants (d) Anti- cancer drugs
- (xiii) A physiologic condition where there is an increase in the arterial blood pressure above normal is. -
 (a) Hypotension (b) Surface tension
 (c) Hypertension (d) None of the above

- (xiv) Identify the following structure.



- (a) Enalapril (b) Fosinopril
 (c) Verapamil (d) Captopril
- (xv) Irbesartan and candesartan are . -
 (a) calcium channel blockers (b) ACE inhibitors
 (c) Angiotension II type I receptor (d) centrally acting sympatholytics.
- (xvi) Cancer can be treated by -
 (a) Surgery (b) Hormonal , chemotherapy and radiation therapy
 (c) Antibiotics (d) All the above
- (xvii) Cimetidine is an example of -
 (a) H1 antagonist (b) H2 antagonist
 (c) Both a and b (d) None of the above
- (xviii) Bumetanide is -
 (a) Loop diuretic (b) Potassium sparing diuretic
 (c) Osmotic diuretic (d) Carbonic anhydrase inhibitors

- (xix) Digoxin is used in -
(a) hypertension (b) Congestive heart failure
(c) oral contraceptives (d) None of the above
- (xx) Women develop angina at a _____ age than men. -
(a) Previous (b) Similar
(c) Later (d) None of the above

Part-B

Long answer questions

[2×10 = 20]

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

- Q.1 Define and clarify antineoplastic agent along with chemical structures and mechanism action mechanical ? Active write SAR of alkylating agents.
- Q.2 Define antihypertensive agents. and classify then Explain mechanism of action of angiotensin receptor blockers. Write the synthesis of methyl dopa.
- Q.3 Define and classify local anesthetics ? Write the synthesis of benzocaine and procaine .

Part-C

Short answer questions.

[5×7 = 35]

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

- Q.1 What are estrogens ? Discuss about synthetic estrogens.
- Q.2 Define and classify antihistamic agents with examples ? Give the synthesis and uses of promethazine .
- Q.3 What are anticoagulants ? Give the mechanism of action and synthesis of warfarin . .
- Q.4 Write a note on metabolism of steroids .
- Q.5 Discuss about the drugs used for erectile dysfunction.
- Q.6 Define the term hypoglycemic agents Give the structure of sulfonyl urea and outline the synthesis of tolbutamide.
- Q.7 What are antihyperlipidemic agents ? Explain their mechanism of action write the structure and uses of clofibrate and lovastatin .

Bachelor of Pharmacy
Fifth Semester Main Examination, December 2021
Pharmaceutical Jurisprudence [BP505T]

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) Standard for mechanical contraceptive are given in schedule -
(a) S (b) R
(c) Q (d) P
- (ii) List of minimum requirements for vector pharmacy is given is schedule
(a) M (b) N
(c) C (d) R
- (iii) Insulin injection comes under schedule
(a) P (b)L (c) H (d) G
- (iv) License for the retail sale of schedule C & C₁ drugs is given in the form-
(a) 19 (b) 20
(c) 18 (d) 21
- (v) Premises licensed for sale of during one inspected at least _____ -
(a) one a year (b) twice a year
(c) trice a year (d) Every month
- (vi) The repacking license is not issued for -
(a) Schedule C drugs (b) Schedule G drugs
(c) Schedule E drugs (d) Schedule H drugs
- (vii) Biologicals belong to schedule -
(a) C (b) L
(c) H (d) G
- (viii) The chairman of DTAB is a _____.
(a) Director , Central Drug laboratory
(b) Director, Central Drug Research laboratory
(c) Director, General Health Services
(d) Drug Controller of India
- (ix) Ibuprofen tablet belongs to schedule
(a) X (b) S
(c) H (d) B

- (x) The premises licensed for manufacture of drug must fulfil the condition according to _____
 (a) Schedule N (b) Schedule M
 (c) Schedule O (d) Schedule B
- (xi) Pharmacist Ethics are related to -
 (a) Pharmacist is related to his profession (b) Pharmacist related to has job
 (c) Pharmacist is related to his trade (d) All of the above
- (xii) The code of pharmaceutical ethics is formulated by
 (a) PCI (b) DTAB
 (c) State Pharmacy Council (d) None of the above
- (xiii) Pharmacy enquiry committee appoint in
 (a) 1953 (b) 1958
 (c) 1950 (d) 1948
- (xiv) Pharmacy Bill was introduced in -
 (a) 1945 (b) 1944
 (c) 1950 (d) 1980
- (xv) Health survey & development committee appoint is
 (a) 1943 (b) 1944
 (c) 1956 (d) 1945
- (xvi) The recommendation of drug enquiry committee were
 (a) Control legislation to control drug & pharmacy
 (b) Setting up of test laboratories in all state
 (c) Setting up of courses for training in pharmacy
 (d) All of the above
- (xvii) First chemist shop in India open by Mr Pathgats in _____ -
 (a) 1811 Kolkata (b) 1889 Kolkata
 (c) 1811 Chennai (d) 1811 Madres
- (xviii) Pharmaceutical jurisprudence is related to
 (a) Drug (b) Pharmacist
 (c) Pharmaceutical Profession (d) All of the above
- (xix) Study of Fundamental legal principles is called
 (a) Jurisprudence (b) Ethics
 (c) Law (d) regulation
- (xx) The govt. of India appoint drug enquiry committee in -
 (a) 1928 (b) 1931
 (c) 1948 (d) 1958

Part-B

Long answer questions

[2x10 = 20 Marks]

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

- Q.1 Write an exhaustive note on Pharmacy Act 1948 ?
- Q.2 Write in detail about the Drug & Classes of the drug prohibited form Import
- Q.3 Explain the constitution & functions of narcotic & psychotropic consultative committee

Part-C

Short answer questions.

[5x7 = 35 Marks]

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

- Q.1 Explain constitution and function of PCI ?.
- Q.2 Describe in detail retail sale drug license .
- Q.3 Describe in details wholesale drug license.
- Q.4 Describe schedule – H ?
- Q.5 Describe schedule – M ?
- Q.6 Explain medical termination of pregnancy.
- Q.7 Write short notes on any two.
- i) Patent
 - ii) IPR
 - iii) DPCO
 - iv) Schedule - G

Bachelor of Pharmacy
Fifth Semester Main Examination, December 2021
Industrial Pharmacy-I [BP502T]

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) According to USP sparingly soluble means the parts of solvents required for one part of solute is -
(a) 30-100 (b) 10-30
(c) 100-1000 (d) less than 1
- (ii) The ratio of void volume to bulk volume is known as. -
(a) Bulk density (b) Tapped density
(c) porosity (d) Granule volume
- (iii) _____ is the ratio of the mean residence time to the absorption time -
(a) Absorption number (b) Dissolution number
(c) Dose number (d) Intrinsic dissolution
- (iv) Which of the following table are formulated to prevent drug release in stomach -
(a) Enteric coated tablet (b) Film coated tablet
(c) Sugar coated tablet (d) Chewable tablet
- (v) Which of the following tablet is also called as bull's eye tablet-
(a) Sugar coating tablet (b) chewable tablet
(c) only tablet (d) lozenges
- (vi) Which of the following is not used as diluents-
(a) Lactose (b) Microcrystalline cellulose
(c) Calcium carbonate (d) Poly vinyl pyrrolidone
- (vii) Adhesion of tablet material to die wall in called -
(a) Mottling (b) Sticking
(c) Picking (d) Capping
- (viii) For sugar coated tablet specified. disintegration time is. -
(a) 15 minute (b) 30 minute
(c) 60 minute (d) 120 minute

- (ix) For stable emulsion phase volume ratio is -
 (a) 52/48 (b) 26/74 (c) 76/26 (d) 48/52
- (x) Draughts contain -
 (a) 5 doses (b) 1-3 doses
 (c) 10 doses (d) 7 doses
- (xi) Which of the following is a type of capsule -
 (a) Hard gelatin (b) Soft gelatin
 (c) Both a and b (d) layered capsule
- (xii) Smallest size of capsule mostly widely used is -
 (a) 0 (b) 5
 (c) 1 (d) 2000
- (xiii) Capsule no '0' has capacity of -
 (a) 250 mg (b) 100 mg
 (c) 450 mg (d) 650 mg
- (xiv) disintegration time of soft capsule is
 (a) 60 minutes (b) 15 minutes
 (c) 30 minutes (d) 5 minutes
- (xv) Ball growth phase is also known as -
 (a) Abrasion transfer phase (b) Coalescence phase
 (c) Layering phase (d) Nucleation phase
- (xvi) Which of the following is the states of nucleation phase -
 (a) Pendular (b) Funicular
 (c) Capillary (d) All of the above
- (xvii) An injection inserted directly into artery is known as -
 (a) Intra - arterial (b) Extra arterial
 (c) Inter- arterial (d) Intra venous.
- (xviii) The pyro genic activity of pyrogens is associated with -
 (a) O-antigenic side chain (b) Lipid A portion
 (c) Central polysaccharid (d) All of the above
- (xix) The direction to be used with in 30 days after opening is given for _____ -
 (a) Suppositorier (b) mixtures
 (c) Paste (d) Eye drop

- (xx) In eye drops thickening agent is used to -
- (a) prolong contact with eye
 - (b) Wash eyes
 - (c) Lubricates contact line
 - (d) Treated soda lime glass

Part-B

Long answer questions

[10x2 = 20 Marks]

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

- Q.1 Explain different route of administration of parenteral Discuss quality control test for parenteral .
- Q.2 Discuss in detail tablet types (method) formulation & Evaluation of tablet .
- Q.3 Explain in detail preformulation consideration in development of solid parenteral dosage forms.

Part-C

Short answer questions.

[5x7 = 35 Marks]

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

- Q.1 Explain method preparation & evaluation of syrup ?
- Q.2 Discuss in detail capsule formulation, types & evaluation.
- Q.3 Explain the mechanism of pellet formulation of growth ?
- Q.4 Explain the formulation factors to be considered in preparation of ophthalmic drudge form.
- Q.5 Explain in detail Aerosols ? closure. .
- Q.6 Write detail notion stability aspects of pack a ginning macerals.
- Q.7 Write short note on (any two)
 - i) Lipstick
 - ii) Emulsion
 - iii) Rye ointment.
 - iv) Parenteral.