

- (c) Fine particles dissolution
(d) Dissolution absorbed into the blood
- (ix) Which coating is thin and dissolves rapidly?
(a) Sugar coating (b) Film coating
(c) Enteric coating (d) Sealing coating
- (x) Which option describes the function of the enteric coated drug?
(a) Tough dissolves slowly
(b) Thin dissolves completely
(c) Dissolves only in alkaline pH of the intestine
(d) Shellac coating
- (xi) From the below options which will be the most widely used form of dosage?
(a) Emulsion (b) Solutions
(c) Tablets (d) Powders
- (xii) Most of the mouth washes contains up to 50% of
(a) Alcohol (b) Water
(c) Fluoride (d) Phosphate
- (xiii) Monophasic doses form used in other than oral cavity
(a) Douches (b) Draught
(c) Elixirs (d) Linctus
- (xiv) Which of the following oral liquid formulations which would be considered as oropharyngeal formulation.
(a) Syrup (b) Elixirs
(c) Mouthwash (d) Linctus
- (xv) Which of the following formulations would not be applicable to ocular administration
(a) Solution (b) Liniment
(c) Suspension (d) Ointment
- (xvi) Intravenous, intramuscular and subcutaneous are all examples of which rout of administration.
(a) Pulmonary administration
(b) Parental administration
(c) Otic administration
(d) Ocular administration
- Q.2 (a) Define Ointments and Pastes. Explain the difference between pastes and Ointment?
(b) Explain different type of pharmaceutical formulation?
- Q.3 (a) What are suspension write the qualities of ideal suspension?
(b) Give the basic preparation of pastes and their preservatives?
- Q.4 (a) Define emulsion and emulsifying agents in detail?
(b) Explain the types of jellies and preparations of jellies?

- Q.5 (a) Define Monophasic Liquid Dosage Form & Write down vehicles for Mixtures?
 (b) Write Explain types of additives
- Q.6 (a) Define Powders? Explain its types, advantages and disadvantages in brief?
 (b) Write Method of preparation of sterile water for injection?
- Q.7 (a) Classify briefly ointment base. Describe any one of them?
 (b) Describe the packaging process of sterile dosage form
- Q.8 (a) Classify ophthalmic products with examples? Write a note on Dentifrices?
 (b) Write manufacturing process of ophthalmic products

Enrollment No.....

Diploma in Pharmacy
Second Year Main Examination, April-2021
PHARMACEUTICAL CHEMISTRY - II [DPY202]

Time: 3:00 Hrs

Max Marks 80

Note : Attempt any five questions.
Each question carries equal marks.

- Q.1 (a) Fill in the blanks with suitable words. (1- 10)**
- (i) Diabetes mellitus is a metabolic disorder which is caused by _____ deficiency.
 (ii) Mebendazole is an example of _____
 (iii) Biological source of Actinomycin is _____
 (vi) Erythromycin is an example of _____ antibiotic.
 (v) Biperiden is a _____ antagonist.
 (vi) Procaine is an example of _____ drug.
 (vii) Hypoglycemic agent _____ blood sugar level.
 (viii) Biological sources of Penicillin is _____
- Q. 1 (b) Multiple Choice Question-**
- (i) **Emetine is used in the treatment of -**
 (a) Malaria (b) Tuberculosis
 (c) Amebiasis (d) None of the above
- (ii) **Which one of these is a first line drug to treat tuberculosis -**
 (a) PAS (b) Rifampin
 (c) Ethambutol (d) Ethionamide
- (iii) **Naltrexone is a morphine**
 (a) Agonist (b) Antagonist
 (c) Partial antagonist (d) All of the above
- (iv) **Oxazepam is a metabolite of**
 (a) Diazepam (b) Lorazepam
 (c) Chlordiazepoxide and diazepam (d) Alprozolam
- (v) **The tetracycline with highest antileprotic activity is**
 (a) Docycycline (b) Oxytetracycline

- (c) Methacycline (d) Minocycline
- (vi) **Piperazine citrate is used as**
 (a) Antimalarial (b) Anthelmintic
 (c) Metabolite antagonist (d) Amoebicidal
- (vii) **The inhalation anesthetic with the fastest onset of action is**
 (a) Nitrous oxide (b) Enflurane
 (c) Isoflurane (d) Nitric oxide
- (viii) **The recent antifungal agent for topical use is**
 (a) Nystatin (b) Amphotericin B
 (c) Ketoconazole (d) Fluconazole
- (ix) **Indirectly acting sympathomimetic Shock is**
 (a) Dopamine (b) Tyramine
 (c) Phenylephrine (d) Isoprenaline
- (x) **Which of the following is most effective antitubercular drug?**
 (a) INH (b) PAS
 (c) Streptomycin (d) Ethambutol
- Q.2 (a) Write about antiseptic and Disinfectants?
 (b) Write about tranquilizers?
- Q.3 (a) Write about anthelmintic drugs with examples?
 (b) Describe the chemistry and uses of any two antimalarial drugs?
- Q.4 (a) Describe cholinergic drugs.
 (b) Describe the chemical structure, nomenclature and uses of Indomethacin?
- Q.5 (a) Write the synthesis of Neostigmine?
 (b) Explain the diuretic drugs with example. Write the synthesis of ethylnitrite.
- Q.6 (a) Explain Anti- neoplastic drugs with example. Write the properties and uses of actinomycin?
 (b) Write note on- i) Diagnostic Agent & ii) Hypoglycemic Agent.
- Q.7 (a) Write a detail note on Adrenergic Antagonist.
 (b) What are NSAIDs? Classify them & draw three structure belonging this category?
- Q.8 (a) Give detail account of CNS stimulants with example.
 (b) Write a descriptive note on Antimalarial Drug.

Enrollment No.....

Diploma in Pharmacy
Second Year Main Examination, April-2021
Pharmacology & Toxicology [DPY203]

Time: 3:00 Hrs

Max Marks 80

Note : Attempt all questions.

Each question carries equal marks.

Q.1 Multiple Choice Question.

1x16

- (i) Autacoids differ from hormones in that:
(a) Autacoids are involved only in the causation of pathological states
(b) Autacoids do not have a specific cell/tissue of origin
(c) Autacoids generally act locally at the site of generation and release
(d) Both 'B' and 'C' are correct
- (ii) Which of the following is a selective H₁ receptor agonist:
(a) 4-methyl histamine (b) Impromidine
(c) 2-Thiazolyl ethylamine (d) Chlorpheniramine
- (iii) Histamine exerts the following actions except:
(a) Dilatation of large blood vessels
(b) Dilatation of small blood vessels
(c) Stimulation of isolated guineapig heart
(d) Itching
- (iv) Fall in blood pressure caused by larger doses of histamine is blocked by:
(a) H₁ antihistaminics alone
(b) H₂ antagonists alone
(c) Combination of H₁ and H₂ antagonists
(d) None of the above
- (v) Histamine is involved as a mediator in the following pathological condition:
(a) Delayed hypersensitivity reaction (b) Inflammation
(c) Carcinoid syndrome (d) Variant angina
- (vi) The drug that can directly release histamine from mast cells without involving antigen-antibody reaction is:
(a) Aspirin (b) Procaine
(c) Morphine (d) Sulfadiazine
- (vii) High anticholinergic property is present in the following antihistaminic:
(a) Diphenhydramine (b) Astemizole
(c) Cetirizine (d) Terfenadine
- (viii) The following H₁ antihistaminic has additional anti 5-HT, anticholinergic, sedative and appetite stimulating properties:
(a) Promethazine (b) Terfenadine
(c) Cyproheptadine (d) Hydroxyzine
- (ix) While prescribing a first generation H₁ antihistaminic the patient should be advised to avoid:
(a) Driving motor vehicles (b) Consuming processed cheese
(c) Strenuous physical exertion (d) All of the above
- (x) Select the H₁ antihistaminic which is used topically in the nose for allergic rhinitis:
(a) Loratadine (b) Cetirizine
(c) Fexofenadine (d) Azelastine
- (xi) The smooth muscle stimulating action of 5-HT is most marked in the:
(a) Bronchi (b) Intestines

- (c) Ureter (d) Biliary tract
- (xii) The 'amine' ergot alkaloid differs from 'amino acid' ergot alkaloid in that it has:
 (a) High oral bioavailability (b) Better CNS penetrability
 (c) Weaker oxytocic action (d) Strong anti-5-HT action
- (xiii) The primary route of administration of insulin is:
 (a) Intradermal (b) Subcutaneous
 (c) Intramuscular (d) Intravenous
- (xiv) The most common adverse reaction to insulin is:
 (a) Hypoglycaemia (b) Lipodystrophy
 (c) Urticaria (d) Angioedema
- (xv) Which of the following is a neuroglucopenic symptom of hypoglycaemia:
 (a) Sweating (b) Palpitation
 (c) Tremor (d) Abnormal behavior
- (xvi) Insulin resistance can be minimized by the use of:
 (a) Corticosteroids (b) Tolbutamide
 (c) Protamine (d) Monocomponent/Human insulin
- Q.2 (a) Discuss the definition of pharmacology and scope of pharmacology
 (b) Write the concepts of essential drug with example
- Q.3 (a) Write brief note on routes of drug administration with example
 (b) Write detail about agonists, antagonists with example.
- Q.4 (a) Write detail about tachyphylaxis, idiosyncrasy, and allergy with example
 (b) What is Pharmacokinetics? Discuss the absorption, distribution, metabolism and excretion of drugs
- Q.5 (a) Write detail about G-protein-coupled receptors & ion channel receptor with example
 (b) Write the dose response relationship and therapeutic index.
- Q.6 (a) Write detail about adverse drug reactions.
 (b) Write detail about Drug interactions with example
- Q.7 (a) Write the brief process of drug discovery, Describe the phases of clinical trials.
 (b) Write detail classification of neurotransmitters.
- Q.8 (a) Write differences between Parasympathomimetics and Parasympatholytics with example
 (b) Write differences between Sympathomimetics, and sympatholytics with example

Diploma in Pharmacy
Second Year Main Examination, April-2021
Pharmaceutical Jurisprudence [DPY204]

Time: 3:00 Hrs

Max Marks 80

Note : Attempt any five questions.

Each question carries equal marks.

Q.1 (a) Fill in the blanks with suitable words. (any 8)

- (i) If pharmacist is making an attempt to capture the business of fellow pharmacist it is_____.
- (ii) Pharmacist should not interfere the duties of physician, he should carry out his own duties that is _____.
- (iii) If pharmacist has made secret contract with doctor it is called as _____.
- (iv) Schedule F(ii) prescribes the standards for_____.
- (v) Schedule M(i) prescribes the requirements of factory premises, plant, equipments, etc for the manufacture of _____.
- (vi) The pharmacist is a vital link between _____ in health care system.
- (vii) Requirements and guidelines on the clinical trials for the import and manufacture of new drug is specified in _____.
- (viii) Drugs marketed under the generic names only are specified in _____
- (ix) Standards of patent and proprietary medicine is specified in _____ .
- (x) Schedule B is related with _____ .

Q.1 (b) MCQ: (Any 8)

- (i) Before independence drugs were imported from following countries except _____.
(a) United Kingdom (b) Germany
(c) France (d) America
- (ii) _____started Bengal Chemicals and Pharmaceuticals Ltd in 1901
(a) Prof. T. K. Gajjar (b) Prof. M. L. Schroff
(c) Acharya Prafulla Chandra Ray (d) Acharya Prafulla Chandra Ray
- (iii) The main objective of the pharmaceutical legislation is to ensure that the patient receives the required quality of drug that is previously tested and evaluated for its _____.
(a) Satisfaction and efficacy (b) Safety and efficacy
(c) Safety and economy (d) Satisfaction or efficacy
- (iv) Drugs Enquiry Committee was appointed under the Chairmanship of _____ in 1931.
(a) Dr. B. Mukharjee (b) Mr. Bathgate
(c) Lt. Col. R. N. Chopra (d) Acharya Prafulla Chandra Ray

(b) Write short note on Latent Drugs (Price control) act.

Q.8 (a) Write the procedure for registration as Pharmacist under Pharmacy act 1948? Describe the constitution of Pharmacy Council of India?

(b) What are loan licenses and repackaging license? Discuss procedure to get the above licenses?

Enrollment No.....

Diploma in Pharmacy
Second Year Main Examination, April-2021
Drug Store & Business Management [DPY205]

Time: 3:00 Hrs

Max Marks 80

Note : Attempt any eight questions.

Each question carries equal marks.

Q.1 (a) Fill in the blanks: (any 8)

- (i) Inventory Control is an important part of _____ management-
- (ii) A system which ensures the provision of the required quantity of inventories of the required quality at the required time with the minimum amount of capital is known as _____.
- (iii) To help _____ in taking inventory decisions is one of the objectives of inventory control.
- (iv) Stock verification sheet is also known as _____ sheet.
- (v) ABC analysis is an important _____ of inventory control.
- (vi) ABC analysis is a technique of material control according to _____.
- (vii) A high turnover ratio means _____ risk of pilferage.
- (viii) _____ helps the management to know the fast and slow moving material in stock.
- (ix) _____ is the result of various causes such as substandard materials, bad supervision, and carelessness in planning etc.
- (x) _____ is defined as the materials which in the process of manufacture are badly damaged and beyond rectification and thus the goods brought to be disposed off as seconds.

Q.1 (b) Multiple choice type questions. (Any 8)

- (i) In a drug store, the expired drug formulation are called:
(a) Scrap items (b) Surplus items
(c) Absolute items (d) None of the above
- (ii) In Ideal drugs store, the inventory is:
(a) In excess (b) Inadequate
(c) Meazre (d) At level between excessive and inadequate
- (iii) In retail drug store, the medicines are arranged according to:

- (a) Manufacturers (b) Pharmacological actions
(c) Alphabetical orders (d) All the above
- (iv) License required to start a new retail drug store is issued by:
(a) Drug controller (b) Drug Inspector
(c) Government analyst (d) Registrar of state pharmacy council
- (v) The minimum qualification to start a retail drugs store is:
(a) D. pharmacy (b) B. pharmacy
(c) Graduate with science (d) Any degree
- (vi) A person who is interested to start a retail drug store must be:
(a) Pharmacy Degree Holder (b) Registered pharmacist
(c) Chemist (d) Druggist
- (vii) A chemist shop deals only in drugs andso is an example of:
(a) General store (b) single line store
(c) Street stall (d) None of the above
- (viii) Audit note book is maintained by whom?
(a) Client's clerk (b) Auditor
(c) Client (d) Audit clerk
- (ix) Which of the following concept says that the consumers will favor those products that are available widely at low cost?
(a) Production Concept (b) Selling Concept
(c) Product Concept (d) Marketing Concept
- (x) Which of the following is not a random sampling method?
(a) Stratified sampling (b) Systematic sampling
(c) Cluster sampling (d) Judgment sampling
- Q.2 (a) What do you understand by a business organization?
(b) Explain various types of channels of distribution those a business organization adopts for sale and marketing.
- Q.3 (a) Explains elements of economics and management.
(b) Explain ABC analysis and VED analysis of inventory control.
- Q.4 (a) Write a short note on trial balance.
(b) Write a short note on balance sheet.
- Q.5 (a) What is cash book? What are its types?
(b) Explain the forms of business organization.
- Q.6 (a) Write a short note on general ledger book.
(b) How a ledger book is different from a journal book?
- Q.7 (a) Explains the technique of analyzing financial statements.
(b) What do you understand by finance planning?

- Q.8 (a) What are the essential qualifications for a competent technical staff to be appointed at a drug house?
(b) Write the steps to be followed for recruitment of the pharmacist at a drug house?

Enrollment No.....

Diploma in Pharmacy
Second Year Main Examination, April-2021
Hospital & Clinical Pharmacy [DPY206]

Time: 3:00 Hrs

Max Marks 80

Note : Attempt any five questions.

Each question carries equal marks.

Q.1 (a) Fill in the blanks with suitable words. (Any 8)

- (i) Type I ADR reactions is _____
(a) Caused when T-cells bind to a specific antigen
(b) Caused by tissue injury
(c) IgE mediated
(d) Caused by cytotoxic antibodies
- (ii) Average time period for phase II clinical trials study is _____
(a) Upto 4 year (b) Upto few month
(c) Upto Two year (d) Upto several year
- (iii) _____ drug can cause lactic acidosis.
(a) Metformin (b) Pioglitazone
(c) Repaglinide (d) Glibenclamide
- (iv) The incidence ADR is highest in _____.
(a) Children (b) Elderly
(c) Women (d) Men
- (v) _____ antihypertensive therapy should be avoided in type-1 diabetes mellitus
(a) ACE inhibitors (b) High dose diuretics
(c) Centrally acting (d) calcium channel blockers
- (vi) _____ is an example of Category X drugs
(a) Diclofenac (b) Ranitidine
(c) Lorazepam (d) Paracetamol
- (vii) _____ is indicated in agitation and restlessness in the elderly, despite the high incidence of extrapyramidal side-effects.
(a) Prochlorperazine (b) Clozapine
(c) Haloperidol (d) Flupentixol
- (viii) _____ is contraindicated during pregnancy due to its Teratogenicity.
(a) Folic acid (b) Calcium
(c) Retinol (d) Iron

- (ix) _____ commonly reported ADR of diuretic class of drugs.
 (a) Hypokalemia (b) Alopecia
 (c) Skin disorder (d) Rhinitis
- (x) _____ causes pharmacodynamics drug interaction.
 (a) Gastric motility changes. (b) Stimulation of metabolism
 (c) Alteration of pH of GIT. (d) Interactions at receptor site

Q.1 (b) MCQs (Any 8)

- (i) Rheumatic arthritis is diagnosed with the help of
 (a) ESR (b) ESR and rheumatic factor
 (c) Haemoglobin (d) Uric acid
- (ii) The objectives of PTC is-
 (a) Advisory (b) Education
 (c) Drug safety and ADR monitoring (d) All the above
- (iii) The word signa in the prescription indicated
 (a) List of ingredients (b) The strength of medication
 (c) Instruction to the patient (d) All of the above
- (iv) Surgical gauze is checked for the following standard-
 (a) Yarn number (b) Thread per stated length
 (c) Weight per unit area (d) All of the above
- (v) The antileprotic drug clofazimine causes
 (a) Nephrotoxicity (b) Photosensitivity
 (c) Hepatotoxicity (d) None of these
- (vi) For knowing the presence of infection disease which one of these blood examination is more significant
 (a) ESR (b) Cholesterol
 (c) Uric acid (d) Haemoglobin
- (vii) Administration of oxygen in newborns causes
 (a) Blood loss (b) Ototoxicity
 (c) Impaired sight (d) None of these
- (viii) High incidence of vaginal adenocarcinoma is associated with the therapy involving
 (a) Stilbesterol (b) Antithyroid
 (c) Testosterone (d) None of these
- (ix) Repeated administration of barbiturates causes -
 (a) Vitamin A deficiency (b) Folate deficiency
 (c) Vitamin C deficiency (d) None of the above
- (x) When structurally different drug give same clinical result it is called.
 (a) Therapeutic equivalence (b) Clinical equivalence
 (c) Bioequivalence (d) None of these

Q.2 (a) Explain Out patient service?

- (b) Write a note on In patient service?
- Q.3 (a) Classify poison, Enlist steps in general treatment of poisoning?
(b) Explain brief about hospital pharmacy?
- Q.4 (a) Define management and health delivery system in India?
(b) Give the detail about the drug distribution system in hospital?
- Q.5 (a) Explain the term drug abuse and drug habituation. How is the treatment of drug abuse done?
(b) Write application of computer in retail pharmacy establishment?
- Q.6 (a) Briefly write on Large Volume Parenteral Solution (LVPs)
(b) Explain Drug Price control Act in detail
- Q.7 (a) Describe in detail medical Termination of pregnancy act1971.
(b) Discuse the provisions of the Act that are applicable to the Sale & Labelling of Homeopathic Medicines.
- Q.8 (a) Explain the term drug abuse and drug habituation. How is the treatment of drug abuse done?
(b) What is Hepatitis? Give its types and symptoms.