

8001

BOARD DIPLOMA EXAMINATION (Inst), (ER-20)

AUGUST-2022

DPH-FIRST YEAR EXAMINATION

PHARMACEUTICS

Time:3 Hours

Total Marks:80

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PART-A

5x6=30

Instructions: (1) Answer any six questions**(2) Each question carries five marks****(3) Answers should be brief and straight to the point and shall not exceed five simple sentences**

- 1 Explain the stages of Pharmaceutical packaging with examples. Write about types, advantages and disadvantages of glass as packaging material.
- 2 Define the term "Extraction". Write about any four methods of extractions.
- 3 Explain the methods for prolonged release of drugs from tablets.
- 4 Discuss about the stability emulsions.
- 5 List out the methods of preparation of ointments. Explain the methods.
- 6 Describe the design, construction and plant layout of a production unit.
- 7 Write notes on the following:
 - (a) Transdermal drug delivery system
 - (b) Mucoadhesive drug delivery system.

PART-B

3x10=30

Instructions: (1) Answer any ten questions**(2) Each question carries three marks****(3) Answers should be brief and straight to the point and shall not exceed five simple sentences**

- 8 Describe the history of Indian Pharmacopoeia
- 9 Define 'Preservative' and classify preservatives with examples.
- 10 Define 'Lyophilisation'. Discuss about principle involved in lyophilisation.
- 11 Mention the manufacturing defects tablets.
- 12 Differentiate between flocculated and deflocculated suspensions.
- 13 Define displacement value and explain its importance.
- 14 What are the different methods of mixing of powders.
- 15 What are the general requirements of parenteral dosage forms?
- 16 Write a brief note on BCG vaccine.
- 17 What is the purpose of calibration?
- 18 What are the advantages of novel drug delivery systems?

Instructions: (1) Answer all questions

(2) Each question carries one marks

(3) Answers should be single word or single sentence.

- 19 The Pharmacy Act of India was enacted in the year
(a) 1947 (b) 1948 (c) 1949 (d) 1950
- 20 Which of the following is a natural preservative?
(a) Neem Oil (b) Sodium Chloride (b) Honey (d) All of the Above
- 21 Which of the following instruments is used for size reduction?
(a) Silverson mixer (b) Soxhlet apparatus (b) Ball mill (d) Triple roller mill
- 22 Which of the following excipients is used to keep tablet intact after compression?
(a) Glidant (B) Diluent (c) Binding agent (d) Disintegrant
- 23 The solid unit dosage form in which the drug substances are enclosed in a water soluble shell or an envelope is
(a) Ointment (b) Capsule (c) Tablet (d) Suppository
- 24 A reconstituted liquid preparation remains stable when stored in the refrigerator for
(a) 1 day (b) 7 to 14 days (c) upto 28 days (d) upto 6 months
- 25 Liposomal drug carriers are used in the treatment of
(a) Malaria (b) Cancer (c) Diabetes (d) Hypertension
- 26 The powder substance which absorbs moisture from atmosphere called
(a) Efflorescent (b) Hygroscopic (c) Volatile (d) None of the above
- 27 The lack of ability to resist infection is called
(a) Immunity (B) Resistance (c) Susceptibility (d) Toxicity
- 28 Pertussis vaccine is used for immunization of children against
(a) Diphtheria (b) Tetanus (c) Tuberculosis (d) Whooping cough
- 29 Rubber ball mills are used for blendings of-----
- 30 Enteric coated tablet disintegrates in ----- hours in simulated intestinal fluid
- 31 The concentration of sucrose in simple syrup IP is-----
- 32 Ophthalmic preparations should be isotonic with lachrymal secretions to avoid-----
- 33 A vaccine prepared from two or more strains of the same species of bacteria or virus is called-----
- 34 The viscosity of nasal drops should be similar to that of -----
- 35 The concentration of alcohol in elixirs is -----
- 36 The parts of hard gelatin capsules are -----
- 37 Friabilator is operated for ----- revolutions per minute
- 38 The two major components of borosilicate glass are -----

8002

BOARD DIPLOMA EXAMINATION (Inst), (ER-20)

AUGUST-2022

DPH-FIRST YEAR EXAMINATION
PHARMACEUTICAL CHEMISTRY

Time:3 Hours

Total Marks:80

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PART-A

5x6=30

Instructions: (1) Answer any six questions**(2) Each question carries five marks****(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer**

- 1 What are NSAID's? Classify them with examples. Give the structure, chemical name, brand names and uses of Aspirin.
- 2 What are Anti-tubercular drugs? Classify them with examples. Give the structure, chemical name and formulations of Isoniazid.
- 3 Define Diuretics and write classification of Diuretics with examples. Write the structure, chemical name, brand names and uses of Frusemide.
- 4 Define antihypertensive drugs and write the classification of antihypertensive drugs with examples. Write the structure, chemical name and uses of propranolol.
- 5 Write the chemical structure, chemical name, brand names and uses of (a) Acetylcholine and (b) Naphazolin
- 6 Define antipsychotics and classify antipsychotics with examples. Write the structure, chemical name, uses and storage conditions of chlorpromazine hydrochloride.
- 7 Define the word 'titration'. Classify the. Explain briefly about Redox titrations.

PART-B

3x10=30

Instructions: (1) Answer any ten questions**(2) Each question carries three marks****(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.**

- 8 Write the principle involved in limit test for chlorides.
- 9 Write the molecular formula, Pharmaceutical formulations, storage and uses of Boric Acid.
- 10 Write the structures of (a) Indole (b) Quinolone and (c) Thiazole
- 11 Define general anesthetics and write any two general anesthetics drugs with their brand names.
- 12 Write the formulations, storage conditions, brand names and uses of Salbutamol.
- 13 Write the formulations, storage conditions, brand names and uses of Nifedipine.
- 14 Write the formulations, storage conditions, brand names and uses of Acetazolamide.
- 15 Give the structure, storage, brand names and uses of Glibenclamide.
- 16 Write a note on Morphine analogues.
- 17 Give the structure, chemical name and uses of Dapsone.
- 18 Give the structure, uses and storage conditions of Cisplatin.

PART-C

1x20=20

Instructions: (1) Answer all questions

(2) Each question carries one marks

(3) Choose the correct answer or write the correct answer.

- 19 Regent used in limit test for lead is
(a) BaCl_2 (b) AgNO_3 (c) Thioglycolic Acid (d) H_2S
- 20 Indicator used in complexometric titrations is
(a) Erichrome Black T (b) Xylenol Orange (c) Mordant Black II (d) All of the Above
- 21 EDTA is
(a) Monodentate (b) Tetradentate (c) Hexadentate (d) Bidentate
- 22 Hydrogen Peroxide is used as
(a) Dentifrice (b) Mouth Wash (c) Antiseptic (d) Antacid
- 23 Haloperidol belongs to the chemical class of
(a) Barbiturate (b) Butyrophenone (c) Benzodiazepines (d) None of the above
- 24 Phenytoin is used as
(a) Anticonvulsant (b) Antidepressant (c) Antipsychotic (d) None of the above
- 25 Which of the following is adrenergic antagonist?
(a) Epinephrine (b) Dopamine (c) Propranolol (d) Acetyl Choline
- 26 The antihypertensive drug that inhibit ACE is
(a) Nifedipine (b) Ramipril (c) Propranolol (d) Clonidine
- 27 Example for opioid analgesics is
(a) Aspirin (b) Morphine (c) Paracetamol (d) Diclofenac
- 28 Biguanide derivative of Anti-malarial drug is
(a) Quinine (b) Cycloguanil (c) Chloroquine (d) Primaquine
- 29 Bacteriostatic agent act on bacteria by
(a) Killing (b) Stopping the growth (c) Multiply the bacteria (d) Stimulating
- 30 Which is not an Alkylating agent?
(a) Chlorambucil (b) Cisplatin (c) Busulfan (d) Mercaptopurine
- 31 Which of the following is propionic and derivative?
(a) Morphine (b) Paracetamol (c) Ibuprofen (d) Aspirin
- 32 ----- is an ultra short acting barbiturate.
- 33 ----- is used for both epilepsy and ahythmias.
- 34 Propofol is a -----
- 35 The structure of pyrimidine is -----
- 36 $\text{Al}(\text{OH})_3$ gel is an example for -----
- 37 Deviation from the true value is called -----
- 38 Closeness between experimental and true value is called -----

8003

BOARD DIPLOMA EXAMINATION (Inst), (ER-20)

AUGUST-2022

DPH-FIRST YEAR EXAMINATION

PHARMACOGNOSY

Time:3 Hours

Total Marks:80

PART-A

5x6=30

Instructions: (1) Answer any six questions**(2) Each question carries five marks****(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer**

- 1 Write about the basic principles involved in the Ayurveda and Homeopathic medical system
- 2 Define Evaluation. Explain chemical evaluation of crude drugs.
- 3 Define and classify Tannins and write down its properties, classification, identification tests for tannins.
- 4 Write biological source, chemical constituents and uses of Acacia and Opium.
- 5 Write biological source, chemical constituents and uses of Silk and Coriander.
- 6 Write biological source, chemical constituents and uses of Digitalis and Colchicum seeds.
- 7 Write the organoleptic characteristics and uses of Rauwolfia and Punarnava.

PART-B

3x10=30

Instructions : (1) Answer any ten questions**(2) Each question carries three marks****(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.**

- 8 Write the chemical constituents of Hyoscyamus and Ergot.
- 9 Write modified borntrager's test for identification of anthraquinone glycosides.
- 10 Write the biological source of following:
(a) Myrrh (b) Aloe (c) Coca
- 11 Define crude drugs. Write alphabetical classification of crude drugs with merits and demerits.
- 12 Name on crude drug belongs to the following family and write its uses.
(a) Labiatae (b) Myrtaceae (c) Meliaceae
- 13 Write briefly on systematic study of crude drugs.
- 14 Write in brief the food sources that contain carotenoids.
- 15 Write diwn the chemical constituents of following:
(a) Lavender oil (b) Cinchona
- 16 Write morphological characteristics of following curde drugs.
(a) Ispaghula (b) Gelatin
- 17 Write about Tridosha siddhanta.
- 18 Defien the following:
(a) Phytochemicals (b) Nutraceuticals (c) Surgical dressings

PART-C

1x20=20

Instructions: (1) Answer all questions

(2) Each question carries one marks

(3) Answers should be single word or single sentence.

- 19 The term 'Pharmacognosy' was first used by German scientist Seydler in his book-----
- 20 Choose the **correct** crude drug with its pharmacological action.
- (a) Antimalarial - Datura
- (b) Anti-Cancer - Vinca
- (c) Oxytotic - Nux Vomica
- (d) Antihypertensive - Acacia
- 21 Ergot contains----- alkaloids.
- 22 ----- alkaloidal drug is used as antitussive.
- 23 Podophyllum is belongs to ----- family.
- (a) Berberidacea (b) Liliaceae (c) Leguminosae (d) Solanaceae
- 24 Biological source of shark liver oil is -----.
- 25 Biological source of Cardamom is
- (a) Dried flower of Elteria cardamom (b) Dried ripe fruit of Elteria cardamom
- (c) Dried leaves of Elteria cardamom (d) Dried roots of Elteria cardmom
- 26 The chemical constituent(s) of Ipecac is / are
- (a) Emetine (b) Cephaline (c) Psychotrine (d) All of the above
- 27 What is / are the chief chemical constituent(s) of coffee?
- (a) Vincristine (b) Strychnine (c) Emodine (d) None of the above
- 28 ----- glycosides give foam on shaking
- 29 Inulin is
- (a) Pre-biotic (b) Pro-biotic (c) Antioxidant (d) Carotenoid
- 30 ----- pink colour with phloroglucinol and conc.HCl.
- 31 Gelatin I consists of which of the following protein(s)?
- (a) Keratin (b) Glutine (c) Both (a) and (b) (d) None of the above
- 32 Which of the following contains resin used as sedative analgesic and narcotic?
- (a) Ginger (b) Tolubalsam (c) Male fern (d) Cannabis
- 33 ----- crude drug is used as antihypertensive and tranquilizer.
- 34 Omega-3-fatty acids reduces the levels of
- (a) LDL.VLDL (B) HDL (C) Antioxidants (d) Fibrin
- 35 Lavender oil is obtained from its
- (a) Leaves (b) Wood (c) Flowering tops (d) Fruit
- 36 Drugs are adulterated for following except
- (a) Enhancement of profit (b) Increase its purity(c) For costly drugs(d) Scarcity of crude drug
- 37 Keller-Killiani test is positive by
- (a) Alkaloids (b) Fixed oils (c) Glycosides (d) Volatile oils
- 38 Fibers are made up of
- (a) Cellulose (b) May or may not be lignin (c) Both (a) and (b) (d) None of the above

8004

BOARD DIPLOMA EXAMINATION (Inst), (ER-20)

AUGUST-2022

DPH-FIRST YEAR EXAMINATION

HUMAN ANATOMY AND PHYSIOLOGY

Time:3 Hours

Total Marks:80

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PART-A

5x6=30

Instructions: (1) Answer any six questions

(2) Each question carries five marks

(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer

- 1 Write the structure of Innominate bone
- 2 Write notes on (a) Blood groups and (b) Importance of RH-factor
- 3 Describe the blood vessels attached to the heart.
- 4 Write the structure and functions of liver with a neat labeled diagram.
- 5 List out the cranial nerves. Write their origin.
- 6 Why is pituitary gland called master gland. Write the secretions and functions of anterior pituitary gland.
- 7 List out the parts of female reproductive system and explain the structure of Ovary.

PART-B

3x10=30

Instructions :(1) Answer any ten questions

(2) Each question carries three marks

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences

- 8 Define the terms 'Anatomy and Physiology'.
- 9 Write the structure and function of mitochondria.
- 10 Draw a neat labeled diagram of neuron.
- 11 Write the mechanism of clotting of blood.
- 12 Write the composition of lymphatic fluid.
- 13 Draw a neat labeled diagram of heart.
- 14 What are the functions of respiratory system?
- 15 Write a note on neuromuscular junction?
- 16 Define and classify nervous system.
- 17 Define the terms 'glaucoma', 'xerophthalmia' and 'myopia'.
- 18 Explain the physiology of urine formation.

PART-C

1x20=20

Instructions: (1) Answer all questions

(2) Each question carries one marks

(3) Answers should be single word or single sentence.

- 19 Myology is the study of
(a) Muscles (b) Bones (c) Cartilage (d) All of the above
- 20 The term used to cell eating is
(a) Exocytosis (b) Phagocytosis (c) Pinocytosis (d) Osmosis
- 21 Which of the following is / are the striated muscles?
(a) Cardiac muscle (b) Smooth muscle (c) Skeletal muscle (d) Both (a) and (c)
- 22 Human skeleton is made up of a total of
(a) 201 bones (b) 206 bones (c) 198 bones (d) 105 bones
- 23 Hemoglobin is present in which cells?
(a) Erythrocytes (b) Leucocytes (c) Platelets (d) None of the above
- 24 Lymphatic fluid is rich in
(a) Iron (b) Antibodies (c) Neutrophils (d) Basophils
- 25 The normal blood pressure of a healthy person is
(a) 100/70 mm of Hg (b) 140/80 mm of Hg (c) 120/80 mm of Hg (d) 160/80 mm of Hg
- 26 The lungs are located in the
(a) Cranial cavity (b) Thoracic (c) Abdominal cavity (d) Pelvic cavity
- 27 Bile salts are essential to digest
(a) Proteins (b) Carbohydrates (c) Vitamins (d) Fats
- 28 A ligament joins
(a) Bone with bone (b) Bone with tendon (c) Muscle with bone (d) Tendon with ligament
- 29 Nervous system is divided into
(a) Central nervous system (b) Peripheral nervous system (c) Both (a) and (b) (d) None of the above
- 30 Loss of sense of smell is called
(a) Anosmia (b) Anuria (c) Anoxia (d) None of the above
- 31 A high level of creatinine in blood indicates
(a) Kidney failure (b) Heart failure (c) Liver failure (d) None of the above
- 32 Anti-diuretic hormone is
(a) Oxytocin (b) Vasopressin (c) Gastrin (d) None of the above
- 33 Formation and maturation of Ovum is
(a) Spermatogenesis (b) Oogenesis (c) Ovulation (d) Fertilization
- 34 Exchange of gases in the lungs is called -----
- 35 Small intestine contains numerous fingers like projections called -----
- 36 Junction between neuron and effector is called -----
- 37 Constriction of pupil is called as -----
- 38 ----- Gland is located at the base of the brain in the sphenoid bone.

8005

BOARD DIPLOMA EXAMINATION (Inst), (ER-20)

AUGUST-2022

DPH-FIRST YEAR EXAMINATION

SOCIAL PHARMACY

Time:3 Hours

Total Marks:80

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PART-A

3x10=30

Instructions :(1) Answer any ten questions

(2) Each question carries three marks

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences

- 1 Define social pharmacy and mention its scope.
- 2 Write about public health system in India.
- 3 What are the effects of pharmaceutical pollution on environment?
- 4 Name three water borne diseases and their causative agents.
- 5 Write a note on infant milk substitute.
- 6 Write a note on functions and deficiency disorders of Thiamine
- 7 What are the ill effects of junk foods?
- 8 What are the clinical features of leprosy and name any two drugs used to treat leprosy?
- 9 Define the terms morbidity, mortality and isolation.
- 10 State the objectives of cancer control programme.
- 11 What do you mean by pharmacoeconomics?

PART-A

5x6=30

Instructions:(1) Answer any six questions

(2) Each question carries five marks

(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer

- 12 Discuss the role of pharmacist in public health.
- 13 Define immunity and classify different types of immunity.
- 14 Explain the hormonal methods of contraceptives.
- 15 What are the genetically modified foods? Mention the advantages and disadvantages of genetically modified foods.
- 16 Mention the names of parasites that cause Malaria. Write about symptoms, complications and treatment of Malaria.
- 17 Write notes on causative agent, epidemiology, clinical manifestations and preventive measures for the disease Cholera.
- 18 Write about revised national tuberculosis control program and DOTS strategy.

PART-C

1x20=20

Instructions: (1) Answer all questions

(2) Question carries one marks

(3) Answers should be single word or single sentence.

- 19 The factors that affect various aspects of health are considered as
(1) Indicators of health (b) Protectors of health (c) Determinants of health (d) All of the above
- 20 Which of the following is not determinant of health?
(a) Environment (b) Heredity (c) Life – Style (d) Pathogenesis
- 21 Which of the following two hormones present in combined pill?
(a) Dopamine and serotonin (b) Prolactin and oxytocin (c) Eastrogen and Progesterone
(d) Eastrogen and testosterone
- 22 Which of the following is source of surface water?
(a) Wells (b) River (c) Springs (d) None of the above
- 23 Which of the following is not a fat soluble vitamin?
(a) Vit-A (b) Vit-B (c) Vit-D (d) Vit-E
- 24 Example of fortification of food is
(a) Salt-Iodine (b) Orange Juice-Sugar (c) Milk-Water (d) All of the above
- 25 Which of the following is an example of dietary fiber?
(a) Cellulose (b) Beta glucan (c) Pectin (d) All of the above
- 26 Triple vaccine MMR gives protection against the disease
(a) Measles (b) Mumps (c) Rubella (d) All of the above
- 27 Which of the following contagious disease is not an air borne infection?
(a) Measles (b) Mumps (c) Rubella (d) AIDS
- 28 Hansen's disease is commonly known as
(a) Leprosy (b) Syphilis (c) Gonorrhoea (d) Trachoma
- 29 Anti-retroviral therapy is given in which disease?
(a) Dengue (b) Chikungunya (c) AIDS (d) Filariasis
- 30 DPT vaccine is a not a preventive vaccine against
(a) Dengue (b) Whooping cough (c) Tetanus (d) Diphtheria
- 31 Which of the following disease is not an arthropod borne disease?
(a) Dengue (b) Asthma (c) Cholera (d) Chikungunya
- 32 Which of the following is not a nutrition related national health programme?
(a) National vitamin A prophylaxis programme (b) National nutritional anaemia prophylaxis
programme (c) national special nutrition programme (d) National AIDS contro programme
- 33 ICDS stands for
(a) International Children Development Society (b) Indian Children Development Society
(c) Integrated Children Development Service Scheme (d) None of the above
- 34 Which of the following expenses are not generally covered under insurance policy?
(a) Hearing aids (b) Naturopathy (c) Contact lenses (d) All of the above
- 35 The foods which are derived from organisms whose genetic material is modified in a way that
does not occur naturally is called -----
- 36 The process of deliberate introduction of one or more micronutrients to certain foods in order to
boost intake of micronutrients is called -----
- 37 H₁N₁ is the causative organism for the disease-----
- 38 Mantoux test is done to identify a disease-----