



8001

ER20-PH-11T

8001

BOARD DIPLOMA EXAMINATION, (ER-20)

AUGUST—2025

DPH - FIRST YEAR EXAMINATION

PHARMACEUTICS

Time : 3 Hours]

[Total Marks : 80

PART—A

5×6=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 length of the answer.

1. What is Pharmacopoeia? Explain the salient features of the eighth edition of Indian Pharmacopoeia. 2+3

2. Define size reduction. Write the contraction and working of ball mill. 1+2+2

3. Explain the evaluation tests for tablets. 5

4. Define suppositories. Classify suppository bases with examples. 2+3

preparation of suppository

5. Write a brief note on effervescent granules. 5

6. Define novel drug delivery systems. Classify them with examples. 2+3

7. Discuss in detail about c GMP. 5

PART—B

3×10=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 a note on packaging of aerosols. *glass aspacking advantages & disadvantages* 3

9. Discuss about the steps involved in freeze drying. 3

10. Write a note on enteric coating and its importance. 2+1

11. Write the differences between Hard and Soft gelatin capsules. 1½+1½

12. Write a note on HLB value. 3

13. Differentiate between paste and ointment. *Differentiate b/w flocculated & deflocculated suspensions.* 1½+1½

14. What are Insufflations? How do you administer them? 3

15. What precautions are to be taken while using eye drops? 3

16. Write notes on the types of Immunity. 3

17. Write a brief note on quality control in pharmaceuticals. 3

18. What are buccal strips? Give an example. 3

Different b/w lotions & Liniments.

PART—C

1×20=20

Instructions : (1) Answer **all** questions.

(2) Each question carries **one** mark.

(3) Answer should be in single word or single sentence.

19. The father of Pharmacy education in India is _____.

20. Type-II glass is also known as _____.

21. Solvent used for extraction is known as _____.

22. Capsule shell is made up of _____.

23. The oil : water : gum ratio to make primary emulsion of fixed oils is _____.

24. When an ointment base contains a number of solid ingredients of different melting points, it is necessary to melt them in _____ order of their melting point.

25. _____ are used in eye drops to increase viscosity of the preparation.

26. Serum containing antibacterial antibodies is called _____.

27. _____ department is responsible for evaluation of batch records.

28. Ascorbic acid and sodium metabisulphite are examples of _____.

29. How many editions of Indian Pharmacopoeia have been published till now?
- (a) 7
 - (b) 8
 - (c) 9
 - (d) 10
30. Siliconization is done to
- (a) glass
 - (b) metal
 - (c) plastic
 - (d) rubber
31. Which of the following colorants is from animal source?
- (a) Titanium dioxide
 - (b) Indigo
 - (c) Cochineal
 - (d) Caramel
32. Principle involved in hammer mill is
- (a) attrition
 - (b) , compression
 - (c) impact
 - (d) screening

33. Unequal distribution of colour on the surface of coloured tablets is
- (a) Capping
 - (b) Picking
 - (c) Mottling
 - (d) Chipping
34. Oral emulsions are mostly ____.
- (a) o/w emulsions
 - (b) w/o emulsions
 - (c) o/w/o emulsions
 - (d) w/o/w emulsions
35. Identify the wrong statement about suppositories.
- (a) It should melt at body temperature
 - (b) It should be pleasant in taste
 - (c) It should release the medicament readily
 - (d) It should keep its shape when being handled
36. Which of the following containers are used for dispensing dusting powders?
- (a) Plastic containers
 - (b) Glass containers
 - (c) Sifter top containers
 - (d) Metal containers

37. Which of the following is used as bactericide and fungicide in eye drops?

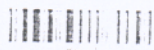
- (a) Benzalkonium chloride
- (b) Phenol
- (c) Mercuric chloride
- (d) Sodium metabisulphite

38. Targeted drug delivery can be achieved in cancer chemotherapy through

- (a) nanoparticles
- (b) prodrugs
- (c) buccal strips
- (d) implants

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24122-PH-007



ER20-PH-12T

8002

BOARD DIPLOMA EXAMINATION, (ER-20)

AUGUST/SEPTEMBER—2025

DPH - FIRST YEAR EXAMINATION

PHARMACEUTICAL CHEMISTRY

Time : 3 Hours]

[Total Marks : 80

PART—A

5×6=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. Explain the principle, procedure involved in the limit test for Arsenic with neat labelled diagram. 1+2+2
2. Define and explain Redox titrations. 5
3. Mention pharmaceutical formulations, brand names, storage and uses of sodium bicarbonate. 1+1+1+2
4. Draw the structure and mention the chemical name, uses and formulations Diazepam and Phenobarbital. 2.5+2.5
5. Draw the structure and mention the chemical name, uses and brand names of Propranolol and ~~Atenolol~~ *Captopril*. 2.5+2.5
6. Define Antimalarial drugs with examples. Draw the structure, mention the chemical name and uses of Chloroquine. 2+1+1+1
7. Define Antibiotics with examples. Draw the structure and mention the chemical name and uses of chloramphenicol. 2+1+1+1

PART—B

3.10=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 Accuracy, Precision and Significant figures. | 1+1+1 |
| 9. | Define Antacids with examples. | 1+2 |
| 10. | Draw the structures of the following :
(a) Pyridine
(b) Oxazole
(c) Phenothiazine | 1+1+1 |
| 11. | Define Antipsychotics with examples. | 1+2 |
| 12. | Mention the examples and uses of Cholinesterase Inhibitors. | 2+1 |
| 13. | Define Antiarrhythmic drugs with examples. | 1+2 |
| 14. | Define and classify Diuretics. | 1+2 |
| 15. | Draw the structure and mention the use of Metformin. | 2+1 |
| 16. | Mention the uses of Morphine, Paracetamol and Ibuprofen. | 1+1+1 |
| 17. | Mention the uses and brand names of Amoxicillin. | 1+2 |
| 18. | Mention the structure and mention the uses of Fluorouracil. | 1+2 |

PART—C

1×20=20

- Instructions : (1) Answer **all** questions.
(2) Each question carries **one** mark.
(3) Choose the correct answer or write the correct answer.

19. Which of the following is a sympathomimetic drug?

- (a) Salbutamol
- (b) Propranolol
- (c) Acetylcholine
- (d) Atenolol

20. Cholinergic blocking agents are used as

- (a) diuretics
- (b) antineoplastic
- ☒ (c) antispasmodic
- (d) antipyretics

21. Organic solvents are used in _____ titrations.

- ☒ (a) acid-base
- (b) non-aqueous
- (c) precipitation
- (d) gravimetric

22. Titrant used in Complexometric titrations is

- (a) phenolphthalein
- ☒ (b) EDTA
- (c) phenol red
- (d) methyl orange

23. Regent used in limit test for chlorides is

- (a) AgCl
- (b) NaCl
- (c) AgNO₃
- (d) NaNO₃

24. Barium chloride is used in the limit test for

- (a) chlorides
- (b) sulphates
- (c) iron
- (d) arsenic

25. Nifedipine is

- (a) diuretic
- (b) hypoglycemic
- (c) antimalarial
- (d) antihypertensive

26. Which of the following is a furan ring containing drug?

- (a) Furosemide
- (b) Atenolol
- (c) Propranolol
- (d) Quinidine

27. An example of carbonic anhydrase inhibitor diuretic drug is

- (a) acetazolamide
- (b) bumetanide
- (c) sporanolactone
- (d) thiazides

28. Glibenclamide drug is used as _____.
29. Which of the following drugs belongs to COX inhibitor class of NSAID?
- (a) Celecoxib
 - (b) Itraconazole
 - (c) Amantadine
 - (d) Dicoumarol
30. Dapsone is used as _____.
31. Which of the following drugs is used in AIDS disease as antiviral agent?
- (a) Fluconazole
 - (b) Zidovudine
 - (c) Ciprofloxacin
 - (d) Clindamycin
32. The NSAID which is also used for primary prevention of cardiovascular risk is
- (a) morphine
 - (b) aspirin
 - (c) itraconazole
 - (d) celecoxib
33. _____ is a macrolide antibiotic.
34. Which of the following drugs does **not** belong to antimetabolite anticancer drug?
- (a) Cyclophosphamide
 - (b) Methotrexate
 - (c) Mercaptopurine
 - (d) Fluorouracil

35. Chlorhexidine Gluconate is used as ____.
- (a) GIT agent
 - (b) dental product
 - (c) anticancer drug
 - (d) topical agent
36. Drugs which accelerate the defecation and act as laxatives are called.
- (a) haematinics
 - (b) cathartics
 - (c) adsorbents
 - (d) protectives
37. An example for Selective Serotonin Reuptake Inhibitor class of antidepressant drug is
- (a) chlorpromazine
 - (b) fluoxetine
 - (c) valproic Acid
 - (d) diazepam
38. The Anticonvulsant drug which can also be used as Anti-Arrhythmic agent is
- (a) valproic acid
 - (b) phenytoin
 - (c) quinidine
 - (d) acyclovir

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24122-PH-007

ER20-PH-13T

8003

BOARD DIPLOMA EXAMINATION, (ER-20)

AUGUST/SEPTEMBER—2025

DPH – FIRST YEAR EXAMINATION

PHARMACOGNOSY

Time : 3 Hours]

[Total Marks : 80

PART—A

5×6=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 biological source, chemical constituents and uses of Rauwolfia and Ginger. 2½+2½
2. Explain the microscopical evaluation of crude drugs with examples. 5
3. Write a note on specific identification tests for the detection of cardiac glycosides based on the glycone moiety. 5
4. Write the biological source, chemical constituents and uses of Black Pepper and Almond Oil. 2½+2½
5. Write the biological source, chemical constituents and uses of Punarnava and Ergot. 2½+2½
6. Write a note on surgical dressings. 5
7. Explain in brief about the Ayurvedic system of medicine. 5

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 Alkaloids, Glycosides and Tannins. 1+1+1
9. Distinguish between organized crude drugs and unorganized crude drugs. 1½+1½
10. Write the biological source of the following : 1½+1½
(a) Coriander
(b) Coffee
11. Define Adulteration. Describe the different methods used for adulteration of crude drugs with examples. 1+2
12. Name one crude drug belongs to the following family and write its biological source : 1½+1½
(a) Rutaceae
(b) Acanthaceae
13. Define Phytochemicals and Neutraceuticals with examples. 1½+1½
14. Define Avaleha, Taila and Bhasma. 1+1+1
15. Write down the chemical constituents of the following : 1½+1½
(a) Vinca
(b) Artemisia
16. Define Diuretics. Write the biological source, chemical constituents and uses of Gokhru. 1+2
17. Write down the causes of rapid emergence of Neutraceuticals. 3
18. Write down the uses of the following : 1+1+1
(a) Jute
(b) Yeast
(c) Acacia

PART—C

1×20=20

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **one** mark.
(3) Answer should be in single word or single sentence.

19. In the word Pharmacognosy, 'Gignosco' means _____.

20. Unorganized crude drugs having the following :

- (a) Gums
- (b) Resins
- (c) Waxes
- (d) All of the above

21. Lignified trichomes are a characteristic of

- (a) Senna
- (b) Digitalis
- (c) Nux Vomica
- (d) Vasaka

22. Fennel is an example for

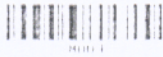
- (a) Carminative
- (b) Diuretic
- (c) Laxative
- (d) Oxytotic

23. Which of the following is an Antihypertensive drug?

- (a) Benzoin
- (b) Charaka
- (c) Vinca
- (d) Rauwolfia

24. Father of Ayurveda is
- (a) Samuel Hahnemann
 - (b) Charaka
 - (c) Hippocrates
 - (d) Agastya
25. Which one of the following is an example for Oxytotic?
- (a) Gokhru
 - (b) Hyoscyamus
 - (c) Ergot
 - (d) Coca
26. Biological source of Guggul is _____.
27. Biological source of Vasaka is
- (a) Adhatoda vasica-Umbelliferae
 - (b) Adhatoda vasica-Apocynaceae
 - (c) Adhatoda vasica-Acanthaceae
 - (d) Adhatoda vasica-Solanaceae
28. Digitalis belongs to _____ family.
29. Which one of the following crude drugs is used as an antidiabetic drug?
- (a) Gymnema
 - (b) Colchicum
 - (c) Rauwolfia
 - (d) Myrobalan
30. Cod liver oil has _____ vitamins.
31. Black catechu comes under which category?
- (a) Astringent
 - (b) Diuretic
 - (c) Antidiabetic
 - (d) Antihypertensive

32. _____ gum is obtained from the stems of *Astragalus gummifer*.
33. Ephedra gives relief from which of the following complications?
- (a) Diabetes
 - (b) Tumour
 - (c) Urinary
 - (d) Asthma
34. Almond oil increases the level of
- (a) LDL
 - (b) VLDL
 - (c) HDL
 - (d) protein
35. Example for herbal tea is _____.
36. Beeswax is prepared from honeycomb of _____ and belongs to the family _____.
37. Borntrager's test is positive for
- (a) Anthraquinone glycosides
 - (b) Alkaloids
 - (c) Tannins
 - (d) Resins
38. Which constituent in the mint is responsible for bitter cooling taste and harsh odour?
- (a) Cinthol
 - (b) Fenchone
 - (c) Terpene
 - (d) Menthol



ER20-PH-14T

8004

BOARD DIPLOMA EXAMINATION, (ER-20)

AUGUST/SEPTEMBER—2025

DPH - FIRST YEAR EXAMINATION

HUMAN ANATOMY AND PHYSIOLOGY

Time : 3 Hours]

[Total Marks : 80

PART—A

5×6=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. Discuss the bones present in the skull. 5
2. Write the mechanism of blood clotting and mention the blood clotting factors. $2\frac{1}{2}+2\frac{1}{2}$
3. Explain the internal structure of heart with the help of a neat diagram. 5
4. List out the cranial nerves. Write the functions of any two cranial nerves. 2+3
5. Describe the structure of skin with a neat labelled diagram. 5
6. Write the physiology of digestion. 5
7. Write the secretions, functions and disorders of thyroid gland. 1+2+2

PART—B

3×10=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. | 1½+1½ |
| 9. Write the structure and functions of mitochondria. | 3 |
| 10. Write the functions and disorders of RBC. | 1½+1½ |
| 11. Define and classify tissues. | 1+2 |
| 12. Write the functions of spleen. | 3 |
| 13. Define stroke volume and cardiac output. | 1½+1½ |
| 14. Write the structure and functions of lungs. | 1½+1½ |
| 15. Draw a neat labelled diagram of human digestive system. | 3 |
| 16. Differentiate between sympathetic and parasympathetic nervous system. | 3 |
| 17. Write the structure of kidney with the help of a diagram. | 3 |
| 18. What are the functions of testosterone? | 3 |

PART—C

1×20=20

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **one** mark.
(3) Answer should be in single word or single sentence.

19. The term used to cell eating is

- (a) exocytosis
- (b) pinocytosis
- (c) osmosis
- (d) phagocytosis

20. Haversian system is the characteristic of

- (a) muscle
- (b) cartilage
- (c) bone
- (d) nerve cell

21. Medulla and cortex are the parts of which endocrine gland?

- (a) Pituitary
- (b) Thymus
- (c) Hypothalamus
- (d) Adrenal

22. Pacemaker of the heart is

- (a) SA node
- (b) Purkinje fibres
- (c) mitral valve
- (d) AV node

23. Hip joint is a type of
- (a) ball and socket joint
 - (b) hinge joint
 - (c) gliding joint
 - (d) pivot joint
24. Which of the following are agranulocytes?
- (a) Lymphocytes
 - (b) Monocytes
 - (c) Both (a) and (b)
 - (d) Basophils
25. The thoracic duct of the lymphatic system pours its contents into the
- (a) aorta
 - (b) subclavian vein
 - (c) internal jugular vein
 - (d) None of the above
26. The parotid glands are located
- (a) under the tongue
 - (b) above the tongue
 - (c) above the upper jaw
 - (d) under the ears
27. A tendon joins
- (a) muscle with bone
 - (b) bone with bone
 - (c) muscle with muscle
 - (d) muscle with ligament

28. Loss of sense of smell is called
- (a) anuria
 - (b) anoxia
 - (c) anosmia
 - (d) None of the above
29. A high level of creatinine in blood indicates
- (a) kidney failure
 - (b) liver failure
 - (c) heart failure
 - (d) None of the above
30. Anti-diuretic hormone is
- (a) gastrin
 - (b) oxytocin
 - (c) vasopressin
 - (d) None of the above
31. Name the only hormone produced in the body when a woman is pregnant.
- (a) Oestrogen
 - (b) Progesterone
 - (c) FSH
 - (d) Gonadotropic hormone
32. Adrenal glands are situated above the
- (a) liver
 - (b) brain
 - (c) lungs
 - (d) kidney

33. Myxoedema is caused by the deficiency of a hormone secreted by _____.
34. The spermatozoa are produced in the _____.
35. Osteology is the study of _____.
36. Blood is a fluid _____ tissue.
37. _____ is the basic structural and functional unit of nervous system.
38. The neurotransmitter released in the parasympathetic nervous system is _____.



ER20-PH-15T

8005

BOARD DIPLOMA EXAMINATION, (ER-20)

AUGUST/SEPTEMBER—2025

DPH – FIRST YEAR EXAMINATION

SOCIAL PHARMACY

Time : 3 Hours]

[Total Marks : 80

PART—A

5×6=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. Describe the various indicators of health.
2. Define immunity and write the table of immunization schedule.
3. Discuss the social impact of drug abuse on social health and productivity.
4. Write about the causative agent, epidemiology, symptoms and preventive measures of Leprosy.
5. Write about the causative agent, epidemiology, symptoms and preventive measures of Chickenpox.
6. Define epidemiology and write the applications of epidemiology.
7. Write the objectives and functions of the National Leprosy Eradication Programme.

PART—B

3×10=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. Name any six water borne diseases.

9. Define the following terms :

- (a) Drug abuse
- (b) Drug addiction

10. Explain the ill effects of bottle feeding.

11. Define balanced diet and write its composition.

12. Define the following terms :

- (a) Macronutrients
- (b) Micronutrients

13. Define dietary supplements and mention any four examples of dietary supplements.

14. Define pesticide and list out the examples of pesticides.

15. Write any three examples of intestinal infections.

16. Write the causative agents of the following diseases :

- (a) Tuberculosis
- (b) Malaria
- (c) Tetanus

17. Write the causative agent and symptoms of Chikungunya.

18. Enlist any six National health programs.

PART—C

1×20=20

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **one** mark.
(3) Answer should be in single word or single sentence.

19. The full form of FIP is

- (a) International Pharmaceutical Federation
- (b) Federation of Indian Pharmacy
- (c) Federation of Italian Pharmacy
- (d) Federation of Indonesian Pharmacy

20. Death rate is defined as the number of deaths per _____ population.

- (a) 100
- (b) 1000
- (c) 100000
- (d) 10000

21. The full form of NUHM is

- (a) National Urban Health Mission
- (b) National Rural Health Mission
- (c) National Union Harmony Ministry
- (d) None of the above

22. General fertility rate is

- (a) a indicator of complete family size
- (b) a measure of fertility
- (c) Both (a) and (b)
- (d) not better than crude birth rate

23. Demography is the scientific study of
- (a) health awareness
 - (b) human population
 - (c) education
 - (d) scientific purposes
24. What is the normal frequency range of sound a human can hear?
- (a) 20 Hz to 20000 Hz
 - (b) 40 Hz to 40000 Hz
 - (c) 50 Hz to 50000 Hz
 - (d) None of the above
25. Which of the following vitamins helps in blood clotting?
- (a) Vit-A
 - (b) Vit-B
 - (c) Vit-K
 - (d) Vit-E
26. 'Xerophthalmia' is caused due to the deficiency of
- (a) Vit-A
 - (b) Vit-B
 - (c) Vit-K
 - (d) Vit-E
27. Which of the following is a surface infection?
- (a) Dengue
 - (b) Chikungunya
 - (c) Trachoma
 - (d) Filariasis

28. *Bordetella pertussis* is the causative organism of
- (a) Dengue
 - (b) Chikungunya
 - (c) Hansen's disease
 - (d) Whooping cough
29. Leprosy is also known as
- (a) Hansen's disease
 - (b) Syphilis
 - (c) Gonorrhoea
 - (d) Chancroid
30. The disease Filariasis is caused by
- (a) *Wuchereria bancrofti*
 - (b) *Brugia malayi*
 - (c) *Brugia timori*
 - (d) All of the above
31. The triplet vaccine MMR gives protection against the disease
- (a) Measles
 - (b) Mumps
 - (c) Rubella
 - (d) All of the above
32. The healthcare facilities are divided into _____ categories.
- (a) public and private
 - (b) rural and urban
 - (c) primary and secondary
 - (d) small and large

33. CMA stands for
- (a) Cost Minimization Analysis
 - (b) Cost Measurement Analysis
 - (c) Cost Maximization Analysis
 - (d) None of the above
34. The name of first-generation IUD is Lippis. Loop
35. Abbreviate the respiratory infection 'SARS' Severe Acute Respiratory Syndrome
36. *Neisseria meningitidis* is a bacteria which causes meningitis
37. 'H₁N₁' is the causative organism of A disease.
38. Coffee powder adulterated with .

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