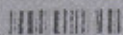


ER-20

2422-PH-004



AUD 'A' Block
-11

ER20-PH-11T

8001

BOARD DIPLOMA EXAMINATION, (ER-20)

MAY-2023

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 brief and straight to the point and shall not exceed five simple sentences.

1. Write a note on formulation of tablets.
2. Define suppositories. Classify suppository bases with examples. 1+4=5
3. Explain the processing steps of parenteral preparations.
4. Discuss in detail about plant layout of a production unit of Pharmaceuticals.
5. What is Pharmacopoeia? Explain the salient features of the Indian Pharmacopoeia? 1+4=5
6. Write a note on the following :
(a) Controlled drug delivery modules
(b) Implants
7. Discuss briefly on the principle and working of Hammer mill with a neat sketch. 1+4=5

/8001

PART—B

Instructions : (1) Answer *any ten* questions.

(2) Each question carries **three** marks.

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

3×10=30

8. Define Capsules. What are the different sizes of Hard gelatin capsules?
9. Define the following dosage forms -- (a) Lotions and (b) Liniments.
10. Define Pharmaceutical container. Classify Pharmaceutical containers.
11. Define extraction. Classify extraction methods.
12. Add a brief note on enteric Antioxidants with examples.
13. Write a note on enteric coating and its importance.
14. What is Quality control and Quality assurance in pharmaceuticals?
15. Define the terms -- (a) Emulsion and (b) Suspension.
16. Classify immunological products with examples.
17. What are the general requirements of parenteral dosage forms?
18. Give a note on Effervescent granules.

PART—C

1-20-20

Instructions: (1) Answer the following questions.
(2) The question carries **one** mark.

19. Which among the following is **not** an extraction method?

- (a) Decoction
- (b) Digestion
- (c) Ingestion
- (d) Infusion

20. Which of the excipient provides strength to the granules in order to keep tablet intact after compression?

- (a) Glidant
- (b) Diluent
- (c) Binding agent
- (d) Granulating agent

21. In capsules, Rotary die process is used for

- (a) filling of powder into capsules
- (b) filling of liquids into capsules
- (c) filling of pellets into capsules
- (d) sorting the filled capsules

22. The suppository meant for introduction into vaginal cavity are known as

- (a) pessaries
- (b) nasal bougies
- (c) urethral bougies
- (d) ear cones

23. Dusting powders should pass through
- (a) Sieve no. 120
 - (b) Sieve no. 22
 - (c) Sieve no. 80
 - (d) Sieve no. 44
24. Nasal drops are not formulated using oily vehicles because they cause
- (a) asthma
 - (b) lipid pneumonia
 - (c) allergy
 - (d) bleeding
25. The solvent used for extraction is known as
- (a) menstrum
 - (b) marc
 - (c) percolate
 - (d) extract
26. Light resistant containers are not used for storage of immunological products due to
- (a) Incompatibility
 - (b) Difficult to visualize the changes
 - (c) Toxic nature
 - (d) None of the above
27. Good Manufacturing Practices (GMP) in Pharmaceuticals ensures which of the following parameters?
- (a) Quality
 - (b) Safety
 - (c) Efficacy
 - (d) All of the above

28. Targeted drug delivery can be achieved in cancer chemotherapy through
- (a) nanoparticles
 - * (b) prodrugs
 - (c) buccal strips
 - (d) implants
29. Which of the following dosage forms are clear, sweetened, aromatic, hydro alcoholic liquids intended for oral use?
- (a) Solutions
 - * (b) Syrups
 - * (c) Elixirs
 - (d) Suspensions
30. Which is the correct statement about desirable properties of ointment base?
- (a) It should be inert, odourless and smooth.
 - (b) It should be compatible with skin with the incorporated medicaments.
 - (c) It should not retard the healing of the wound.
 - * (d) All of the above
31. Hermetically sealed containers are also called
- (a) light resistant
 - (b) water proof
 - (c) air tight containers
 - * (d) Both (a) and (b)
32. The efficient size separation process depends on
- (a) Particle size
 - (b) Particle shape
 - (c) Particle density
 - * (d) All of the above

33. Which of the following is a coloring agent?
- (a) Disodium EDTA
 - (b) Methyl Paraben
 - (c) Saccharin
 - (d) Tartrazine
34. _____ is external monophasic dosage form used to treat acute otitis media.
35. _____ is the process where glass particles fuse together and form pores between them.
36. The descriptive material pertaining to any drug or therapeutic agent or preparation included in the pharmacopocia is known as _____.
37. In dissolution test, dissolution media is maintained at a temperature of _____.
38. Ball mill works on the principle of _____.

★★★

21122-PH-010



ER20-13T

8003

BOARD DIPLOMA EXAMINATION, (ER-20)

MAY-2023

DPH - FIRST YEAR EXAMINATION

PHARMACOGNOSY THEORY

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 evaluation is the content but not the length of the answer.

1. Define the term 'Pharmacognosy'. Describe the scope of Pharmacognosy.
2+3=5
2. Describe various systems of classification of crude drugs. Write the merits and demerits of morphological classification. 3+1+1=5
3. Write the biological source, chemical constituents and uses of belladonna.
3+1+1=5
4. Define anticancer drugs. State the biological source of Vinca. 3+2=5
5. What are surgical dressing? Write Biological source and uses of absorbent cotton. 3+2=5
6. Define Cosmetics. Write chemical constituents and uses of olive oil. 3+1+1=5
7. Write about the systematic investigation of plant material for its phytochemical behaviour. 5

/8003

1

[Contd...

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 briefly on harmful adulteration with examples. | 2+1=3 |
| 9. Define Terpenoids. Write the classification of terpenoids. | 2+1=3 |
| 10. Define Volatile oils. List out methods of isolation of volatile oils. | 2+1=3 |
| 11. Write the biological source and uses of Ashwagandha. | 2+1=3 |
| 12. What is an Anti-tussive? Give two examples. | 2+1=3 |
| 13. Define Pharmaceutical aids. Give two examples for binding agents. | 2+1=3 |
| 14. Define fibres and classify fibres. | 2+1=3 |
| 15. Explain the method of preparation of Talia. | 3 |
| 16. What are certain drugs permitted to be exported from and imported into India? | $1\frac{1}{2}+1\frac{1}{2}=3$ |
| 17. What are Pro-biotics and Pre-biotics? Give examples. | $1\frac{1}{2}+1\frac{1}{2}=3$ |
| 18. What are Omega-3-fatty acids? Mention their uses. | $1\frac{1}{2}+1\frac{1}{2}=3$ |

PART—C

1 × 20 = 20

Instructions : (1) Answer the following questions.

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

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

19. Alkaloids are detected by using

- (a) Molisch's test
- (b) Millon's test
- (c) Mayer's test
- (d) Borntrager's test

20. Sandalwood oil contains

- (a) α , β -Santalol
- (b) olein
- (c) volatile oil
- (d) fat

21. Liposomes are made up of

- (a) phospholipids
- (b) proteins
- (c) starch
- (d) sucrose

22. Spirulina is a/an

- (a) algae
- (b) fungi
- (c) bacteria
- (d) virus

23. Vitamin E, A, C and beta carotene belong to the class of

- (a) probiotics
- (b) fibres
- (c) antioxidants
- (d) carotenoids

/8003

24. Govt. factory for the extraction of Cinchona alkaloids is located in
- Tamil Nadu
 - Andhra Pradesh
 - West Bengal
 - Uttar Pradesh

25. Which system of medicines was originated from Dravidian?

- Unani
- Ayurveda
- Homeopathy
- Siddha

26. Medicines prepared in the form of tablets and pills are known as

- Taila
- Lehya
- Gutika
- Churna

27. Among tridosha, Pitta is related to

- air and space
- fire and water
- water and space
- vayu and agni

28. Which of the following leaf constants of crude drugs remains constant throughout the age?

- Stomatal number
- Vein islet number
- Stomatal Index
- Vein islet termination number

29. Morphine is obtained from

- Datura
- Opium
- Nux-vomica
- Dioscorea

30. Fennel is an example for

- carminative
- diuretic
- laxative
- oxytotic

31. Chemical constituents of Yeast consist of

- enzymes
- vitamins
- fats
- All of the above

32. Chief chemical constituents of lanoline are

- cholesterol
- iso cholesterol
- Both (a) and (b)
- None of the above

33. Cuoxam reagent is

- zinc oxide solution
- magnesium oxide solution
- ammonical cupric oxide solution
- None of the above

34. Digitalis is used as ____.

35. The use of Ginseng is ____.

36. An official book containing monographs of drugs is called as ____.

37. Resins ____ products of plants.

38. Senna is used as ____.

★★★



ER20-15T

8005

BOARD DIPLOMA EXAMINATION, (ER-20)

MAY-2023

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. List out and discuss the various indicators of health. 2+3=5
2. Define immunization and write about immunization schedule followed in India. 1+4=5
3. Define contraception and classify various contraceptive methods. 1+4=5
4. What are genetically modified foods? Mention the advantages and disadvantages of genetically modified foods. 1+2+2=5
5. What is AIDS? How is it transmitted? Write a note on the preventive measures and treatment of AIDS. 1+1+3=5
6. Mention different types of Hepatitis. Write about mode of transmission, symptoms and preventive measures of Serum Hepatitis. 1+4=5
7. Write the objectives, functioning and outcomes of national anti-malaria programme. 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 notes on various dimensions of the health. 3
9. List out the United Nations Millennium Development Goals for health. 3
10. What are the ill effects of bottle feeding? 3
11. Mention the various sources of water pollution. 3
12. What are dietary supplements? Name different types of food supplements. 1+2=3
13. What is artificial ripening of fruits? Give two examples of artificial ripening agents. 2+1=3
14. Mention the importance of water in the diet. 3
15. Define epidemiology and mention its applications. 2+1=3
16. Name various arthropod borne diseases. 3
17. What is the role of pharmacist in National health programmes? 3
18. Write about the importance of Pharmacoeconomics. 3

PART—C

1 × 20 = 20

Instructions : (1) Answer the following questions.

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

19. Social pharmacy deals with the role of medicines from the ____ perspective.

- (a) social
- ~~(b)~~ scientific
- (c) humanistic
- (d) All of the above

20. Full form of FIP is

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

21. Family planning refers to

- (a) limit the number of children in a family
- (b) avoid unwanted child births
- ~~(c)~~ Both (a) and (b)
- (d) None of the above

22. What is the addictive drug in tobacco products?

- (a) Ethanol
- (b) Nicotine
- ~~(c)~~ Ammonia
- (d) Tar

23. Which of the following vitamins is used in blood clotting?

- (a) Vit-A
- (b) Vit-B
- ~~(c)~~ Vit-K
- (d) Vit-E

24. The disorder associated with iron deficiency is

- (a) rickets
- (b) anaemia
- (c) goitre
- (d) convulsions

25. Which among the following is not the ill effect of junk foods?

- (a) Reduced appetite
- (b) Increased LDL
- (c) Weight loss
- (d) Obesity

26. Kwashiorkor is a malnutrition disorder of

- (a) Protein
- (b) Carbohydrates
- (c) Lipids
- (d) None of the above

27. DOTS is the treatment strategy for

- (a) Dengue
- (b) Chikungunya
- (c) T. B.
- (d) Filariasis

28. MMR vaccine is a not a preventive vaccine against

- (a) Mumps
- (b) Malaria
- (c) Rubella
- (d) Measles

29. Which of the following is not a Sexually Transmitted Disease (STD)?

- (a) Cancer
- (b) Syphilis
- (c) Gonorrhoea
- (d) Herpes

/8005

[Contd...

4

30. Poliomyelitis affects

- (a) Respiratory system
- (b) Neuromuscular system
- (c) Cardiovascular system
- (d) All of the above

31. How can we prevent the spreading of the disease Covid-19?

- (a) Maintaining the social distance in public places
- (b) Proper hand washing etiquettes
- (c) Usage of masks
- (d) All of the above

32. Strategy for national leprosy eradication programme is

- (a) early detection by the trained health workers
- (b) regular treatment with multi-drug therapy
- (c) intensified health education and public awareness
- (d) All of the above

33. A health insurance policy normally covers

- (a) hospital boarding charges
- (b) physician and surgeon charges
- (c) nursing and ancillary charges
- (d) All of the above

34. A state of complete physical, mental and social well being and not merely an absence of disease is called _____.

35. The deficiency of Thiamine leads to _____.

36. The substances that induce the growth or activity of microorganisms that contribute to the well being of their host are called _____.

37. Mantoux test is used to identify the disease _____.

38. Poliomyelitis virus replicates mainly in the _____ tract.

★★★

/8005

AA23-PDF

21122804 - PH-044



ER20-12T

8002

BOARD DIPLOMA EXAMINATION, (ER-20)

MAY-2023

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. Define Antineoplastic. Classify antineoplastic agents with examples. Write the structure, chemical name and uses of Cyclophosphamide. 1+1+3=5
2. Define Antibiotics and classify them. Write the structure, chemical name and uses of Chloromphenicol. 1+1+3=5
3. Define Antimalarial drugs. Give their classification and write structure, chemical name and uses of Chloroquine. 1+1+3=5
4. Define Diuretics and write classification of Diuretics with examples. Write the structure, brand names and uses of Furosemide. 1+1+3=5
5. Define Antiarrhythmic drugs and write the classification of antiarrhythmic drugs with examples. Write the structure, chemical name and uses of Phenytoin sodium. 1+1+3=5
6. Define Cholinergic drugs. Classify them. Write the structure, chemical name and uses of Neostigmine. 1+1+3=5
7. What are impurities? Write about the various sources of impurities. 1+4=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 the principle involved in the limit test for heavy metals. 3
9. Write a note on Volhard's method. 3
10. Write the molecular formula, pharmaceutical formulations, storage and uses of Sodium bicarbonate. 3
11. Write the structures of (a) Furan, (b) Phenothiazine and (c) Pyrrole. 3
12. Write the structure, chemical name and uses of Ketamine hydrochloride. 3
13. Define Sympathomimetic agents. Write any two sympathomimetic drugs and mention their uses. 1+2=3
14. Define Antihypertensives. Give two examples of drugs used with their brand names. 1+2=3
15. Write the formulations, storage conditions, brand names and uses of Benzthiazide. 3
16. Give the structure, chemical name and uses of Acyclovir. 3
17. Write the official preparations, brand names and uses of Azithromycin. 3
18. Write structure, chemical name and uses of Aspirin. 3

PART—C

1 × 20 = 20

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

(2) The question carries **one** marks.

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

19. Limit test carried out in

- (a) Test tube
- (b) Measuring cylinder
- (c) Iodine Flask
- (d) Nessler's cylinder

20. Non-aqueous titrations carried out for

- (a) weakly acidic drugs
- (b) weakly basic drugs
- (c) water insoluble compounds
- (d) All of the above

21. Boric acid used as

- (a) dentifrice
- (b) mouth wash
- (c) Antimicrobial
- (d) Antacid

22. Identify five membered heterocyclic ring

- (a) Pyridine
- (b) Pyrazine
- (c) Pyrimidine
- (d) Pyrrole

23. Pre-anesthetics are used to produce

- (a) Relieve nausea and vomiting
- (b) Calming effect
- (c) Relieve anxiety
- (d) All of the above

/8002

3

| Contd...

24. Fluorouracil is structurally similar to

- (a) Adenine
- (b) Guanine
- (c) ☒ Uracil
- (d) Cytosine

25. Gray baby syndrome is caused by

- (a) Penicillin
- (b) Erythromycin
- (c) ☒ Chloromphenicol
- (d) Streptomycin

26. Zidovudine is used as

- (a) ☒ Antimalarial
- (b) Antifungal
- (c) Antiviral
- (d) Anthelmintic

27. The para acetamido phenol is

- (a) Paracetamol
- (b) Piroxicam
- (c) Aspirin
- (d) ☒ Morphine

28. Insulin is secreted by

- (a) Pancreas
- (b) Adrenal cortex
- (c) Pituitary gland
- (d) Kidney

29. Drug having furfural moiety

- (a) Acetazolamide
- (b) ☒ Furosemide
- (c) Bumetanide
- (d) Spironolactone

30. Proline derivative

- (a) ☒ Clonidine
- (b) Hydralazine
- (c) ☒ Captopril
- (d) Propranolol

31. Griseofulvin is used as

- (a) Antimalarial
- (b) Anticancer
- (c) ☒ Antiulcer
- (d) Antifungal

32. Apparatus used in the limit test for Arsenic is called ____.

33. Cotrimoxazole is combination of sulfamethoxazole and ____.

34. Sodium fluoride is used as ____.

35. Gabapentin is a ____ analogue.

36. Pyridostigmine is ____ enzyme inhibitor.

37. Spiroan lactone is a ____ antagonist.

38. The antimalarial drug quinine is obtained from ____ alkaloids.

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22109-PH-032



ER20-PH-14T

8004

BOARD DIPLOMA EXAMINATION, (ER-20)

MAY-2023

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 brief and straight to the point and shall not exceed five simple sentences.

1. Define tissue. Classify epithelial tissues and write their functions.
2. Define and classify the bones of vertebral column.
3. Write short notes on (a) Blood groups and (b) Rh-factor.
4. Describe the blood vessels attached to the Heart.
5. Explain the structure and functions of Liver with the help of a diagram.
6. List the parts of Brain. Describe their functions with a labelled diagram.
7. Describe the structure of a Nephron.

PART—B

3×10=30

Instructions : (1) Answer *any ten* questions.

(2) Each question carries **three** marks.

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

8. Name the hormones present in posterior pituitary gland with their functions.
9. Write a short note on Renin-Angiotensin system.
10. Write a short note on Spermatogenesis.
11. How does skin regulate body temperature?
12. Write a short note on Cerebrospinal Fluid.
13. Write the structure and functions of Spleen.
14. Draw a neat labelled diagram of human digestive system.
15. Write a short note on lungs.
16. Write a short note on pulmonary circulation.
17. Explain the term Erythroblastosis-fœtalis.
18. Define the term Sutures and name the various sutures present in the Skull.

PART—C

1 × 20 = 20

Instructions : (1) Answer the following questions.

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

19. Accumulation of uric acid in the synovial joints causes a disease called

- (a) Bursitis
- (b) Gout
- (c) Osteoporosis
- (d) Osteomalacia

20. Albumin is synthesized in

- (a) Plasma
- (b) Liver
- (c) Stomach
- (d) Intestine

21. Blood pressure = Cardiac output × _____

- (a) Stroke volume
- (b) Heart rate
- (c) Peripheral resistance
- (d) None of the above

22. Respiratory Centre is located in the

- (a) Pons
- (b) Medulla
- (c) Cerebrum
- (d) Cerebellum

/8004

3

| Contd.

23. Factor essential for absorption of Vitamin-B12 is

- (a) pepsin
- (b) renin
- (c) intrinsic factor
- (d) extrinsic factor

24. Reflex is the simplest response to a

- (a) Stimulus
- (b) Irritability
- (c) Conductivity
- (d) Rhythmicity

25. Loss of sense of smell is called

- (a) Anosmia
- (b) Anuria
- (c) Anoxia
- (d) None of the above

26. Hormone secreted by the kidney is

- (a) Melatonin
- (b) Insulin
- (c) Erythropoietin
- (d) Serotonin

27. Anti-diuretic hormone is

- (a) Oxytocin
- (b) Vasopressin
- (c) Gastrin
- (d) None of the above

/8004

[Contd...

4

28. A Tendon joints

- (a) Muscle with Bone
- (b) Bone with Bone
- (c) Muscle with Muscl
- (d) Muscle with Ligament

29. Oestrogen and progesterone are secreted by ____.

30. ____ stimulates growth and activity of thyroid gland and secretion of T_3 and T_4 .

31. An upper expanded end of the ureter is called ____.

32. The lateral hammer shaped bone present in ears is ____.

33. Dendrite is part of ____ cell.

34. Muscle fibres contains numerous finger like projection called ____.

35. Small intestine contain proteins called myosin and ____.

36. The sum of vital capacity and residual volume is ____.

37. The property of cardiac muscle to generate its own impulse is ____.

38. The ABO blood group system was discovered by ____.

/8004

5

AA23-PDF