



ER20-PH-11T

8001

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

AUGUST—2022

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. 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 extraction.
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

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. 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 in 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?

*

*

*

PART—C

1×20=20

- Instructions :**
- (1) Answer **all** question.
 - (2) Each question carries **one** mark.
 - (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
 - (c) Honey
 - (d) All of the above
- 21.** Which of the following instruments is used for size reduction?
- (a) Silverson mixer
 - (b) Soxhlet apparatus
 - (c) 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 is 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.** Pertusis vaccine is used for immunization of children against
a) diphtheria
(b) tetanus
(c) tuberculosis
(d) whooping cough
- 29.** Rubber ball mills are used for blending 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 ____.

★ ★ ★



ER20-PH-11T

8001

BOARD DIPLOMA EXAMINATION, (ER-20)

JANUARY—2023

DPH – FIRST YEAR EXAMINATION

PHARMACEUTICS

Time : 3 hours]

[Total Marks : 80

PART—A

- 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 the term Pharmacy. Write a brief note on Pharmacy as a career. 2+3=5
- 2. Define Pharmaceutical Aids with examples. Describe the colouring agents with reference to their sources. 3+2=5
- 3. What is Mixing? Give a note on the construction and working of Silverson Mixer homogeniser? 1+2+2=5
- 4. Discuss the various additives used in the formulation of tablets. 5
- 5. Classify emulsifying agents. Explain them in brief. 2+3=5
- 6. Define Ointment. Classify ointment bases with examples. 2+3=5
- 7. Write a note on the formulation of parenteral preparations. 5

PART—B

- Instructions :** (1) Answer **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 'rubber' as a packaging material and its disadvantages. 2+1=3
9. Define filter aids. What is their importance in filtration? 1+2=3
10. Write about wet granulation method. 3
11. State the advantages and disadvantages of capsules. 1½+1½=3
12. What are the qualities of ideal suspension? 3
13. Differentiate between liniments and lotions. 1½+1½=3
14. How will you dispense powders containing potent drugs? 3
15. Define the terms Toxoid, Vaccine and Sera. 1+1+1=3
16. Write a brief note on quality control in pharmaceuticals. 3
17. What are Prodrugs? Give examples. 2+1=3
18. Write a note on National Formulary of India. 3

PART—C

1×20=20

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **one** mark.

19. The latest edition of the 'Indian Pharmacopoeia' was published in

- (a) 2018
- (b) 2019
- (c) 2020
- (d) 2021

20. Ampules are

- (a) single-dose containers
- (b) multi-dose containers
- (c) light resistant containers
- (d) well-closed containers

21. Artificial sweetener is

- (a) Sucrose
- (b) Sucralose
- (c) Mannitol
- (d) Dextrose

22. The principal forces involved in Cyclone separator are

- (a) centripetal forces
- (b) centrifugal forces
- (c) tangential forces
- (d) adhesive forces

- 23.** The excipient used to increase the bulk of tablets is
- (a) diluent
 - (b) glidant
 - (c) binding agent
 - (d) disintegrant
- 24.** The Father of Surgery is
- (a) Charaka
 - (b) Sushruta
 - (c) Chanakya
 - (d) Dhanvantari
- 25.** Which of the following colorants is derived from animal source?
- (a) Titanium dioxide
 - (b) Indigo
 - (c) Cochineal
 - (d) Caramel
- 26.** Soft gelatin capsules shell is made elastic by the addition of
- (a) Sorbitol
 - (b) Povidone
 - (c) PEG
 - (d) Lactose
- 27.** The syrups are stored at _____
- (a) 8 - 15 °C
 - (b) 2 - 8 °C
 - (c) temperature not exceeding 25 °C
 - (d) All of the above

- 28.** Which of the following topical preparations may show thixotropic behaviour?
- (a) ointment
 - (b) paste
 - (c) gel
 - (d) suppository
- 29.** Soft gelatin capsules are also known as _____
- 30.** The concentration of alcohol in elixirs _____
- 31.** Theobroma oil is also known as _____
- 32.** The dose of the drug can be controlled in aerosols by the help of _____
- 33.** _____ are used in eye drops to increase viscosity of the preparation.
- 34.** _____ is a sterile suspension of one or more strains of *Salmonella typh.*
- 35.** _____ is documented evidence that gives high assurance of quality standards.
- 36.** Vaginal suppositories are also known as _____
- 37.** RPVC stands for _____
- 38.** Freeze drying is also known as _____





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

- 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. 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 pharmacopoeia is known as _____.
- 37.** In dissolution test, dissolution media is maintained at a temperature of _____.
- 38.** Ball mill works on the principle of _____.

★★★



ER20-PH-11T

8001

BOARD DIPLOMA EXAMINATION, (ER-20)

SEPTEMBER—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 comprehensive and criterion for valuation is the content but not length of the answer.

1. Define drying. Add a note on the principle, construction and working of fluidized bed dryer. 1+4=5
2. Describe the design, construction and plant layout of a production unit. 5
3. Explain the stages of pharmaceutical packaging with examples. Write about types of glass as packaging material. 2+3=5
4. Define size separation. Add a brief note on the principle, construction and working of cyclone separator. 1+4=5
5. Discuss the various additives used in formulation of tablets. 5
6. Define emulsion. Explain the stability of emulsions. 1+4=5
7. Define the term tablet. Write the classification and disadvantages of tablets. 1+2+2=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 about wet granulation method for the preparation of tablets. 3
9. Classify Novel Drug Delivery Systems with examples. 3
10. Define nasal drops. Classify them with suitable example. 1+2=3
11. List out any three official Pharmacopoeias and add a note on the importance of Pharmacopoeia. 3
12. Define capsule. What are the different sizes of hard gelatin capsules? 1+2=3
13. Write about methods of preparation of effervescent granules. 3
14. Define preservative and classify preservatives with examples. 1+2=3
15. Differentiate between paste and ointment. 3
16. Write a short note on BCG vaccine. 3
17. Define the terms toxoid, vaccine and sera. 1+1+1=3
- * 18. Write the differences between syrups and elixirs. 3

*

PART—C

1×20=20

*

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

19. The Pharmacist Registration Certificate is issued by

- (a) Indian Pharmacy Council
- (b) State Pharmacy Council
- (c) Central Drug Standard Control Organization
- (d) AICTE

20. Artificial sweetener is

- (a) sucrose
- (b) saccharin
- (c) mannitol
- (d) dextrose

21. Pharmacy practice in India is governed by which Act?

- (a) IPA, 1948
- (b) AICTE Act, 1987
- (c) D & C Act, 1940
- (d) D & C Rules, 1945

22. Ampoules are

- (a) single dose containers
- (b) multi-dose containers
- (c) light resistant containers
- (d) well closed containers

*

*

23. Benzoic acid is

- * (a) colouring agent
- (b) flavouring agent
- (c) sweetening agent
- (d) a preservative

24. The tablet which is placed under the skin by minor surgery in order to release the drug is called

- (a) liposomes
- (b) nanoparticles
- (c) prodrugs
- (d) implants

25. Which of the following is a concentrated or nearly saturated solution of sucrose in purified water?

- (a) Solutions
- (b) Syrups
- (c) Elixirs
- (d) Suspensions

26. Gelatin is the hydrolysed product of

- (a) pectin
- (b) tannin
- (c) shellac
- (d) collagen

27. Ideal characteristic(s) of NDDS is/are

- (a) cost effective
- (b) medical-optimum
- * (c) to increase the bioavailability
- (d) All of the above

28. Evaluation of the parental preparation is done by
- * (a) sterility test
 - (b) leakage test
 - (c) clarity test
 - (d) All of the above
29. Which method is **not** used for the preparation of suppositories?
- (a) Hand-rolling method
 - (b) Compression method
 - (c) Fusion method
 - (d) Levigation method
30. The suppository meant for introduction into nasal cavity are known as
- (a) pessaries
 - (b) nasal bougies
 - (c) urethral bougies
 - (d) ear cones
31. Which of the following is used as bactericide and fungicide in eye drops?
- (a) Benzalkonium chloride
 - (b) Phenol
 - (c) Mercuric chloride
 - (d) Sodium metabisulphite
32. Suppositories meant for insertion into the vaginal cavity are
- (a) pessaries
 - (b) granules
 - * (c) suppositories
 - (d) injectables

33. The concept of displacement value is associated with

- * (a) ointment
- (b) paste
- (c) gel
- (d) suppository

34. Comparison of results of sample with those produced by a traceable standard is nothing but

- (a) testing
- (b) validation
- (c) calibration
- (d) qualification

35. GMP ensures which of the following parameters?

- (a) Quality
- (b) Safety
- (c) Efficacy
- (d) All of the above

36. PCI stands for _____ .

37. _____ is used to prevent the oxidation of the product.

38. What is triple point?

★★★

*

*