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GOVERNMENT OF KARNATAKA BOARD OF EXAMINING AUTHORITY  
D. Pharm Part-1 Examination (ER-2020) - JANUARY- 2025  
PHARMACEUTICS

Max marks: 80 M

Time: 3 Hours

Note: i) Answer 6 questions from section A, 10 questions from section B and all questions from section C.

- ii) Draw diagram wherever necessary.
- iii) Answer to the point for objective type.

SECTION -A

6X5=30 M

Long Essay (Answer any six)

1. Write the advantages, disadvantages and challenges of novel drug delivery systems.
2. Explain the principle and working of ball mill
3. Explain in brief the development of pharmacy profession in India.
4. Write the different type of glass containers. Give any two disadvantages of glass
5. Explain sterility test for parenteral products
6. Describe the preparation of effervescent granules
7. Explain the construction and working of double cone blender

SECTION -B

10X3=30 M

Short Essay (Answer any ten)

8. What is GMP? Give its significance
9. Discuss the history of Indian Pharmacopoeia
10. Explain the selection criteria for the selection of packaging material
11. Define preservative. Write the requirements of ideal preservative
12. Write a note on transdermal drug delivery system
13. Differentiate hard and soft gelatin capsules
14. Explain the working of freeze drier with a neat diagram
15. Define and classify tablets?
16. Write the construction and working of fluidized bed dryer
17. Classify powders according to IP
18. Differentiate syrup and elixer

SECTION -C

20X1= 20M

Objective type (Answer all questions)

19. What is Pharmacopoeia?
20. Give two examples of synthetic sweeteners
21. In which year the first pharmacopoeia of India was published?
22. What is unit dose packaging?
23. Name any two flavouring agents
24. Define Quality control
25. What is the principle of hammer mill?
26. Define insufflations.
27. Give two examples of targeted drug delivery system
28. Define vaccine
29. Define Quality assurance
30. Give two examples of tablet diluents
31. \_\_\_\_\_ type of surfactant used in preparation of niosomes
32. Soft gelatin capsules are availabl in \_\_\_\_\_ and \_\_\_\_\_ shapes
33. The solvent used for extraction is known as \_\_\_\_\_
34. Very fine powder should pass through sieve number \_\_\_\_\_
35. Match the following.

A

- 1) Borosilicate glass
- 2) Sintered glass filter
- 3) Glidant
- 4) Membrane filter

B

- a) To improve the flow property of granules or powder
- b) 400-500 million pores per square centimeter
- c) For separation of virus from bacteria
- d) Highly resistant glass
- e) Mask the unpleasant odour and taste
- f) To impart colour to the products

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**GOVERNMENT OF KARNATAKA  
BOARD OF EXAMINING AUTHORITY  
D. Pharm Part-I Examination (ER-2020) JANUARY 2025**

**PHARMACEUTICAL CHEMISTRY (QPCODE 520)**

**Time: 3 Hours**

**Max marks: 80 M**

**Note: i) Answer 6 questions from section A, 10 questions from section B and all questions from section C.**  
**ii) Draw diagram wherever necessary.**  
**iii) Answer to the point for objective type.**

**SECTION -A**

**Long Essay (Answer any six)**

**6X5=30 M**

1. Explain in brief different sources of impurities with examples in pharmaceutical substances.
2. Write the principle and chemical reactions involved in the assay of ferrous sulphate
3. Define and classify general anaesthetics with examples. Write the structure of Thiopental Sodium.
4. Write the structure, chemical name and uses of Acetyl choline and Neostigmine.
5. What are antiarrhythmic agents? Explain with examples.
6. Define and classify antimalarial drugs with examples. Write the structure of any one antimalarial drug.
7. Define and classify antibiotics. Write the structure of Amoxicillin.

**SECTION -B**

**Short Essay (Answer any ten)**

**10X3=30 M**

8. Write short note on dental products.
9. Define Sedative and hypnotics. Write the structure, chemical name and uses chlorpromazine Hydrochloride
10. Define and give one example for a) Haematinic b) Antacid c) Cathartics.
11. Write the structure, storage stability and uses of Propranolol.
12. Write the structure, chemical name, uses and any one brand name of Metformin
13. Write the structure, chemical name, storage and stability uses of Furosemide.
14. Define Analgesic and Antipyretic. Write the structure uses of Aspirin and Paracetamol.
15. What are cholinergic drugs? Classify with examples.
16. Define and classify urinary anti-infective agents.
17. Explain the terms narrow spectrum and broad spectrum antibiotics with examples.
18. Write the structure, storage stability and uses of Cisplatin

**SECTION -C**

**Objective type (Answer all questions)**

**20X1= 20M**

19. What is an Error? Mention its types
20. What is the role of lead acetate cotton in the limit test for Arsenic
21. Name any two medicinal gases along with its formula.
22. What are topical agents? Give examples.
23. Name any two official compounds of Iron.
24. Write the structure of Pyridine and Pyrimidine?
25. What are vasodilators?
26. Name the heterocyclic ring present in Chloroquine
27. Name any two antibiotics used to treat cancer,
28. What are anti-inflammatory agents?
29. Give the stability and storage of insulin.
30. Write the structure of Imipramine
31. One example for cardiac glycoside is -----
32. One brand name of Acyclovir is -----
33. Spironolactone is a -----
34. Naloxone is -----
35. Match the following

**A**

- 1) Rifampicin
- 2) Phenytoin Sodium
- 3) Chlorothiazide
- 4) Pilocarpine

**B**

- a) Miotic
- b) Diuretic
- c) Antitubercular drug
- d) Hypoglycemic agent
- e) Antiepileptic drug
- f) Anticonvulsant drug

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**GOVERNMENT OF KARNATAKA  
BOARD OF EXAMINING AUTHORITY  
D. Pharm Part-I Examination (ER-2020) JANUARY 2025  
HUMAN ANATOMY AND PHYSIOLOGY  
(QP CODE 540)**

Time: 3 Hours

Max marks: 80 M

Note: i) Answer 6 questions from section A, 10 questions from section B and all questions from section C.  
 ii) Draw diagram wherever necessary.  
 iii) Answer to the point for objective type.

**SECTION -A****6X5=30 M****Long Essay (Answer any six)**

1. Define Joints. Explain Synovial Joints and disorders of Joints.
2. Classify W.B.C with examples and write the functions of WBC.
3. Explain the structure of heart with a neat labeled diagram.
4. Describe the physiology of digestion and absorption.
5. Draw a neat labeled diagram of Brain. Write the functions of each part.
6. Describe the structure of ear. Write a note on physiology of of hearing
7. Explain pancreas and its hormones with functions.

**SECTION -B****10X3=30 M****Short Essay (Answer any ten)**

8. Classify connective tissue.
9. Discuss ABO system and Rh factor of blood group.
10. Discuss the structure and functions of Lymph node.
11. Explain in brief ECG with its significance
12. What you mean by external respiration and tissue respiration.
13. Write a short note on salivary gland.
14. Write a note on meninges.
15. Write a note on glaucoma and cataract
16. Explain in brief Micturition.
17. Name the hormones of adrenal gland and mention their function.
18. Describe in detail the phases of Menstruation.

**SECTION -C****20X1= 20M****Objective type (Answer all questions)**

19. Define the terms anatomy and physiology.
20. Write the functions of mitochondria
21. Define Neurophysiology.
22. Write the functions of Lysosomes.
23. Name the different types of epithelial tissue.
24. Write the functions of bone.
25. What is rheumatic disorder?
26. Mention the normal value of haemoglobin.
27. Define tissue.
28. What is Angina Pectoris?
29. Define Splenomegaly.
30. Define respiration
31. The covering of lungs is called \_\_\_\_\_
32. \_\_\_\_\_ is the longest bone in the body.
33. Normal count of platelets is \_\_\_\_\_.
34. Formation of \_\_\_\_\_ in the ovaries is called as oogenesis
35. Match the following

**A**

- 1) Menopause
- 2) Pancreas
- 3) Pituitary gland
- 4) Lungs

**B**

- a) Insulin
- b) Excrete Carbon dioxide
- c) Oestrogen
- d) Power house of the cell
- e) Master gland of the body
- f) The menstruation cycle stops.

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**D. Pharm Part-I Examination (ER-2020) JANUARY 2025**  
**PHARMACOGNOSY (QP CODE 530)**

Time: 3 Hours

Max marks: 80 M

Note: i) Answer 6 questions from section A, 10 questions from section B and all questions from section C.

ii) Draw diagram wherever necessary.

iii) Answer to the point for objective type.

**SECTION A****Long Essay (Answer any six)****6X5=30 M**

1. Define Pharmacognosy. Write the historical development and scope of Pharmacognosy.
2. Mention the classification of crude drugs and explain the pharmacological classification with examples.
3. Define Adulteration. Explain the different types of adulteration with examples.
4. Write the Biological Source, chemical constituents of any two drugs belonging to the therapeutic category of a. Laxatives b. Carminatives.
5. Define alkaloids. Write its isolation method and general chemical tests to identify alkaloids.
6. Explain the basic principles involved in Ayurveda and Unani system of Medicine.
7. Define Pharmaceutical aids. Classify them with examples.

**SECTION B****Short Essay (Answer any ten)****10X3=30 M**

8. Define Drug Evaluation. Explain the Organoleptic evaluation of crude drugs.
9. Write the Qualitative chemical tests for Tannins.
10. Write the Biological source and chemical constituents of any two antitussive crude drugs.
11. Write the Biological source, Chemical constituents of Papaya and Diastase.
12. Write the preparation of Absorbent cotton.
13. Explain the cosmetic uses of Aloe vera gel and olive oil.
14. Write the preparation of Arista and Asava.
15. What are antioxidants? Write its therapeutic application.
16. Distinguish Probiotics and Prebiotics.
17. Write the biological source and chemical constituents of antirheumatic drugs.
18. Write the role of nutraceuticals in maintaining health.

**SECTION C****Objective type (Answer all questions)****20X1= 20M**

19. Write an example of Resin.
20. Write the major active constituent of Digitalis.
21. Define astringents.
22. Name a CNS Stimulant crude drug along with its Biological source.
23. Which drug is used as antimalarial agent? Give its Biological source.
24. What are terpenoids?
25. Define Herbal cosmetic.
26. Write the main chemical constituent of clove flower bud.
27. Define diuretics with an example.
28. Name a plant fiber with biological source used in surgical dressing.
29. Name an antidiabetic drug with chemical constituents.
30. Define antiseptics and disinfectants.
31. Ergot is obtained from -----
32. ----- is an antirheumatic crude drug.
33. The chemical constituent in Black Pepper is -----
34. ----- is an anti tumour crude drug.
35. Match the following

**A**

1. Ashwagandha
2. Digitalis
3. Turmeric
4. Ginger

**B**

- a. Cardiotonic
- b. Antiseptics
- c. Adaptogen
- d. Carminative
- e. Diuretics
- f. Antimalarial

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**GOVERNMENT OF KARNATAKA BOARD OF EXAMINING AUTHORITY**  
**D. Pharm Part-I Examination (ER-2020) JANUARY 2025**  
**SOCIAL PHARMACY (QP CODE 550)**

Time: 3 Hours

Max marks: 80 M

Note: i) Answer 6 questions from section A, 10 questions from section B and all questions from section C.  
 ii) Draw diagram wherever necessary.  
 iii) Answer to the point for objective type.

**SECTION A****Long Essay (Answer any six)****6X5=30 M**

1. Describe in detail the various types of health indicators.
2. Explain the various types of vaccines with examples.
3. What is air pollution? Discuss the ill effects of air pollution with suitable examples.
4. Describe the functions and deficiency disorders of vitamin D and vitamin K.
5. Write the clinical presentation and causative agents for any two arthropod-borne diseases.
6. Write the clinical features and role of pharmacist in preventing Hepatitis B.
7. Enlist various ongoing National health programmes in India.

**SECTION B****Short Essay (Answer any ten)****10X3=30 M**

8. Discuss the scope of social pharmacy in improving public health.
9. Explain the ill effects of environmental pollution due to Pharmaceuticals.
10. Describe the importance of breast feeding.
11. What are proteins? Discuss the clinical presentation of Marasmus.
12. Mention any two effects of artificial ripening and genetically modified food.
13. Define the following terms a) Quarantine b) Isolation c) Outbreak
14. Write the clinical presentation and preventive measures for Whooping cough.
15. Describe preventive measures and mode of transmission of Cholera.
16. Write the application of epidemiology.
17. Write a note on food poisoning.
18. Write objectives and functioning of National mental health programme.

**SECTION C****20X1= 20M****Objective type (Answer all questions)**

19. What is health?
20. Define the term health determinant.
21. Mention any two communicable diseases.
22. What is drug substance abuse?
23. Define the term tubectomy.
24. Name any two ill effects of infant bottle feeding.
25. Mention any two narcotic drugs.
26. Define the term immunity..
27. Mobile application developed by the government of India for tracking COVID-19  
 a) Sanjeevini b) Suraksha c) Arogya Sethu d) Apta Rakshaka
28. Define the term Epidemic
29. What is cost benefit analysis?
30. Give any two examples of direct medical costs.
31. The bacterium that causes syphilis is called -----
32. Pernicious Anemia occurs due to a deficiency of ----- vitamin.
33. RNTCP stands for -----
34. BCG is a ----- type of vaccine
35. Match the following

**A**

1. Tetanus
2. Dengue
3. Hepatitis C
4. Typhoid

**B**

- a. Inhalation of toxic chemicals
- b. Transmission through contaminated soil
- c. Transmission through contaminated food
- d. Transmission through contaminated blood
- e. Vector-borne transmission
- f. Transmission through inorganic metal

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