

GOVERNMENT OF KARNATAKA
BOARD OF EXAMINING AUTHORITY
D. Pharm Part-II Examination (ER-2020) JANUARY 2024
BIOCHEMISTRY & CLINICAL PATHOLOGY

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. Explain the qualitative tests of carbohydrates.
2. Define and classify proteins with examples. Explain the deficiency diseases of proteins.
3. Define and classify lipids with examples. Write the functions of lipids.
4. Discuss factors affecting enzyme action with graphs and equations.
5. Discuss in detail the role of fat soluble vitamins.
6. Explain glycolysis. Write its bioenergetics.
7. Describe urea cycle. Write its significance.

SECTION -B

10X3=30 M

Short Essay (Answer any ten)

8. Write a note on biological role of carbohydrates.
9. What are essential amino acids? List them.
10. Functions of RNA.
11. Write a note on diagnostic applications of enzymes.
12. Write the functions of Vitamin C, vitamin B12 and folic acid.
13. Write a note on ketone bodies, its test and significance.
14. Explain transamination with an example.
15. Write the functions of calcium, iron, phosphorous.
16. Write a note on water balance.
17. Mention the abnormal constituents of urine. Write their significance.
18. What is lipid profile?

SECTION -C

20X1= 20M

Objective type (Answer all questions)

19. Who coined the term 'Biochemistry'?
20. Structure of sucrose.
21. Give two examples of unsaturated fatty acids.
22. Mention pyrimidine bases.
23. What is holoenzyme?
24. What is an inhibitor? Give an example.
25. Role of biotin.
26. What is normal level of cholesterol in humans?
27. Write the deficiency diseases and symptoms of iodine.
28. What is RDA for zinc?
29. Which is the major anion of extracellular fluid?
30. Define genetic engineering.
31. Rothera's test is used to test _____.
32. Proteins acting as bio-catalyst are called as _____.
33. Full form of SGPT is _____.
34. Vitamin B12 deficiency causes _____.
35. Match the following:

A

- 1) Glycogenesis
- 2) ATP gain in TCA cycle
- 3) Cytochrome oxidase
- 4) Albinism

B

- a) 38 ATPs
- b) Electron Transfer Chain.
- c) Synthesis of glycogen
- d) 12 ATPs
- e) Breakdown of glycogen
- f) Abnormal protein metabolism

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GOVERNMENT OF KARNATAKA
BOARD OF EXAMINING AUTHORITY
D. Pharm Part-II Examination (ER-2020) JANUARY 2024
COMMUNITY PHARMACY AND MANAGEMENT

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 prescription with its parts and write a note on good dispensing practice.
2. Define patient counseling. Explain the type of barriers for effective counseling and mention strategies to overcome it
3. What are over the counter (OTC) medications? Explain the counseling for OTC products.
4. Define self-medication. Explain the role of Pharmacists in promoting the safe practices during self-medication for cough and cold.
5. Explain the legal requirements to set up a community pharmacy.
6. Discuss in detail the common inventory control methods used in community pharmacy.
7. Outline the key components of SOP for Pharmacy Management.

SECTION -B

Short Essay (Answer any ten)

10X3=30 M

8. Write a note on history and development of community pharmacy in India.
9. Explain the pharmaceutical standard operating procedure(SOPs)
10. Explain the steps involved in prescription dispensing process.
11. Write a note on various written communication skills.
12. Explain the scenarios of Patient package Inserts (PPI) use in India and other countries.
13. Highlight the importance of various health screening services.
14. Write the key points to be covered during counseling for over the counter (OTC) products
15. Discuss the role of Pharmacist in OTC medication dispensing.
16. Outline the key features of Pharmacy operation software.
17. Discuss the key area where accountancy is important in a community pharmacy.
18. Explain the key strategies for effective inventory management in a community pharmacy.

SECTION -C

Objective type (Answer all questions)

20X1= 20M

19. Define community pharmacy management
20. Mention any two pharmacy operation softwares.
21. Give some examples for OTC medications.
22. List the Pharmacists advices for fever management
23. Pharmacist advise for mouth ulcers
24. Mention one importance of early detection health screening service.
25. How medication review service is useful.
26. List the factors influencing medication non-adherence.
27. Mention any two patient counseling points for COPD patients
28. List the strategies to overcome medication non-adherence.
29. List the types of communication skills.
30. What information can be recorded from medication history interviews
31. Enlist the steps to be followed during handling of prescription
32. Define good dispensing practices.
33. What do you mean by good pharmacy practice?
34. What do you mean by medication adherence?
35. Match the following

A

B

- | | |
|--|---|
| 1) Cholesterol testing service | a) Taking medications correctly |
| 2) First Indian Pharmacopeia was published | b) 1811 |
| 3) COPD | c) Help to identify risk of developing heart diseases |
| 4) Dispensing medications | d) COPD |
| | e) 1868 |
| | f) Change of the prescription drugs |

**GOVERNMENT OF KARNATAKA
BOARD OF EXAMINING AUTHORITY
D. Pharm Part-II Examination (ER-2020) JANUARY 2024
HOSPITAL AND CLINICAL PHARMACY**

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 the process of development of Hospital Formulary.
2. What is periodic checking of expiry? Write the SOP for the same.
3. "Medication need to be stored in appropriate storage conditions". Elaborate the statement.
4. What is complete floor stock drug distribution? Give its advantages and disadvantages.
5. Describe the various steps involved in patient counseling.
6. Classify ADR. Explain Hypersensitivity reactions.
7. Explain pulmonary function test.

SECTION -B

Short Essay (Answer any ten)

10X3=30 M

8. Write a short note on NABH accreditation.
9. Describe the role of clinical pharmacist in ADR management.
10. Add a note on prevention of misuse of reserved antibiotics.
11. Write a note on distribution of drugs in NICU.
12. What are the possible medication errors observed while preparing and administering IV admixture.
13. Explain the importance of computer software in inventory control in hospital.
14. Give the goals and objectives of clinical pharmacist on ward round.
15. Add a note on drug induced hematologic disorders.
16. Describe the role of clinical pharmacist in interpretation of clinical laboratory test.
17. Give the symptoms, fatal dose and treatment for opium poisoning.
18. Enlist different types of medication errors as per ASHP.

SECTION -C

Objective type (Answer all questions)

20X1= 20M

19. Give examples for the movable equipment used in outpatient dispensing.
20. Define investigational drugs.
21. Write the formula to calculate stock turnover rate.
22. Walk in freezer can maintain the temperature in what range.
23. Define satellite pharmacy.
24. What are IV admixtures?
25. What are radiopharmaceuticals?
26. Expand MAR.
27. Define anaphylaxis.
28. Give the normal range of TSH.
29. Define Pharmacovigilance
30. As per NCC MERP medication errors is defined as?
31. pH of IV dextrose solution is
32. The presence of bilirubin in urine analysis indicates
33. In asthma, the value of FVC (Forced vital capacity) increases or decreases
34. CDSCO is located in
35. Match the following

A

B

1) MEDIPHER

a) LASA drugs

2) Glaucoma

b) Copper sulphate

3) Oxalic Acid

c) Morphine

4) Retrovir-Ritonavir

d) Lime

e) Atropine

f) Medication monitoring software

**GOVERNMENT OF KARNATAKA
BOARD OF EXAMINING AUTHORITY
D. Pharm Part-II Examination (ER-2020) JANUARY 2024
PHARMACOTHERAPEUTICS**

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.
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iii) Answer to the point for objective type.

SECTION -A

Long Essay (Answer any six)

6X5=30 M

1. Write the etiopathogenesis, pharmacological and non-pharmacological management of hypertension.
2. Define TB. Write in brief about clinical manifestations and management of it.
3. Write etiology, pathophysiology and classification of Diabetes.
4. Discuss in detail about pharmacological management and psychosocial intervention in Alzheimer's disease.
5. Briefly explain about etiopathogenesis of peptic ulcer and role of anti-ulcer agents in its treatment.
6. What is opportunistic infection? Write their etiopathogenesis and pharmacological management.
7. Write a note on etiopathogenesis and clinical manifestations of epilepsy. Write different types of epilepsy and two drugs used in its treatment.

SECTION -B

Short Essay (Answer any ten)

10X3=30 M

8. Define megaloblastic anaemia along with their clinical manifestations.
9. What are the scope and objectives of Pharmacotherapeutics?
10. Write the etiopathogenesis and non-pharmacological treatment of alcoholic liver disease.
11. Write in detail management of osteoporosis.
12. Briefly mention about diagnosis and investigation tests for hyperlipidemia.
13. Write a detail note on pharmacological management of U.T.I
14. What are migraine triggers? List out home remedies in its treatment.
15. Write a note on diagnosis and investigations of C.H.F
16. Define anxiety. Write the pharmacological treatment of anxiety.
17. What are the common types of asthma? Enlist various substances that trigger asthma.
18. Give a note on clinical manifestation and pharmacological management of hypothyroidism.

SECTION -C

Objective type (Answer all questions)

20X1= 20M

19. Define Angina pectoris.
20. Name any two diseases of antimicrobial resistance.
21. What is a standard treatment guideline?
22. Define bronchodilators and give examples.
23. What is crohn's disease?
24. Define premenstrual syndrome.
25. What is radio iodine therapy?
26. Write etiology of dysmenorrhea.
27. What is rheumatoid arthritis?
28. What is megaloblastic anaemia?
29. What is depression? Name one drug used in its treatment.
30. Define eczema.
31. Osteo arthritis is condition which affects
32. is first line antipsychotic drug.
33. Oral anti-estrogen medication in poly cystic ovarian syndrome is
34. Degeneration of retinal and optic nerves leads to condition.....
35. Match the following

A**B**

- 1) Gonorrhoea
- 2) COVID-19
- 3) Leishmaniasis
- 4) Psoriasis

- a) Viral infection
- b) Excitement laser therapy
- c) STD
- d) Protozoal infection
- e) Cystoscopy
- f) Auto immune disease

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GOVERNMENT OF KARNATAKA
BOARD OF EXAMINING AUTHORITY
D. Pharm Part-II Examination (ER-2020) JANUARY 2024
PHARMACOLOGY

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.
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SECTION -A

Long Essay (Answer any six)

6X5=30 M

1. Discuss the various factors modifying drug action.
2. Give the pharmacological actions of adrenalin.
3. Classify general anaesthetics. Explain the stages of general anaesthesia.
4. Classify antiarrhythmic drugs. Explain the pharmacological actions of Quinidine.
5. Describe the physiological role of insulin.
6. Classify various anticancer drugs.
7. Classify antitubercular agents. Explain the actions and adverse effects of isoniazid.

SECTION -B

Short Essay (Answer any ten)

10X3=30 M

8. Give the significance of plasma protein binding.
9. What is myasthenia gravis? Give its treatment.
10. Give the classification of sedatives and hypnotics.
11. Discuss on the drugs used in the therapy of atherosclerosis.
12. Name various oral Iron preparations, dosage and uses.
13. What are antitussives? Classify them with examples.
14. Classify various drugs used in the peptic ulcer.
15. Write the action, uses and adverse effects of thiazide diuretics.
16. Give the actions and uses of propylthiouracil.
17. Mention the physiological role of histamine.
18. Explain the actions, uses and adverse effects of Zidovudine.

SECTION -C

Objective type (Answer all questions)

20X1= 20M

19. Define first pass metabolism.
20. What is agonist?
21. Define plasma clearance.
22. What is glaucoma?
23. Give the two uses of miotics.
24. Name one centrally acting muscle relaxant.
25. What is the use of amitriptyline?
26. Name two oral anticoagulants.
27. Name two prokinetic class of antiemetic drugs.
28. Give the two uses of laxatives.
29. Define biologicals.
30. Name one biologic product to treat rheumatoid arthritis.
31. Diacetylmorphine is also called as _____.
32. Acetazolamide is _____ enzyme inhibitor.
33. Parathormone increases plasma _____ levels.
34. Prostaglandins are synthesized by the action of _____ on arachidonic acid.
35. Match the following

A

B

- | | |
|--------------------|--|
| 1) Propranolol | a) Staining of teeth |
| 2) Aspirin | b) Dryness of mouth |
| 3) Ferrous sulfate | c) Worsening of bronchial asthma. |
| 4) Atropine | d) Increases salivary secretion |
| | e) Peptic ulceration and asthma exacerbation |
| | f) Peptic ulceration |

GOVERNMENT OF KARNATAKA BOARD OF EXAMINING AUTHORITY
D. Pharm Part-II Examination (ER-2020) - JANUARY- 2024
PHARMACY LAW AND ETHICS

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 the salient features of Education Regulation- 2020
2. Describe the prescribed qualification and duties of Government Analyst
3. Describe the constitution and functions of Drugs Technical Advisory Board (DTAB)
4. Describe the criteria for a medicine to be included in the National List of Essential Medicines (NLEM)
5. State Pharmacist's Oath and describe the relationship to be maintained with the medical profession
6. Explain e-governance of license
7. Explain the salient aspects of New Drugs and Clinical Trial Rules, 2019

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

8. Describe the functions of Pharmacy Council of India
9. Explain the sampling procedure to be followed by Drug Inspector
10. What is a loan license?
11. Describe the offences and penalties under Narcotic and Psychotropic Substances Act, 1985
12. What are conditionally exempted advertisements?
13. Describe the constitution of Institutional and Animal Ethics Committee
14. Describe the salient aspects of Poisons Act, 1919
15. Give the calculation of Retail price of a formulation according to Drugs Price Control Order, 2013
16. Explain the requirements of experience / training for a registered medical practitioner to terminate a pregnancy
17. Describe the organogram of Central Drugs Standard Control Organization (CDSCO)
18. What are the different types of licenses coming under the umbrella of Pharmaceutical business?

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

19. Give the colour code for biomedical waste collection bins
20. State the objective of Clinical Establishment Act
21. What is Magic remedy?
22. Define Cannabis (Hemp)
23. Define Pharmaceutical legislation
24. Explain the acronym CPCSEA
25. Give the label requirement for food products
26. Define Retail price
27. Name any two drugs included in NLEM
28. What is a Community Pharmacy?
29. Differentiate Branded drug and Generic drug
30. Enumerate the functions of blood bank
31. Rules for Drugs and Cosmetics Act were framed in the year _____
32. _____ is the National regulatory authority for Drugs and Cosmetics in India
33. Discarded medicines and cytotoxic waste should be disposed in _____
34. _____ has laid out National ethical guidelines for biomedical and health research involving human participants
35. Match the following.

A**B**

- 1) NDMA
- 2) 1948
- 3) CDSCO
- 4) Medical device

- a) Emergency use authorization
- b) Establishment of blood bank
- c) Pharmacy Act
- d) Disaster management
- e) Diagnosis, prevention and monitoring
- f) Consumer protection