

3. Answer any 6 (Six) questions from the following:

5×6

- a) Classify amino acids based on chemical nature.
- b) Briefly describe (with reaction) the four oxidative steps of the Krebs's cycle
- c) Write a note on various reactions involved in protein metabolism.
- d) Classify carbohydrate with example. Write down chemical structure of a reducing sugar. 4+1
- e) What do you mean by the abnormal constituents of urine? Write down the significance of abnormal constituents of urine in health and disease.
- f) Write a short note on structure and functions of cholesterol in the body.
- g) Write down the functions and deficiency condition of fat-soluble vitamins in human body.
- h) Write short notes on liver function tests.

August 2025

PHARMACOTHERAPEUTICS

Time Allowed: 3 Hours

Full Marks: 80

Answer all Questions as directed

1. A. Choose the correct alternative (any ten).

1×10

- a) The line of therapy of PCOS are- (a) combined oral contraceptives; (b) antiandrogenic agents; (c) Metformin; (d) all of them
- b) Management of amenorrhoea is done by- a) cyproterone; (b) spironolactone; (c) medroxyprogesterone; (d) prostaglandin
- c) The first line therapy of dysmenorrhoea is- (a) NSAIDs; (b) Antiandrogens; (c) estrogens; (d) Metformin
- d) First line treatment of scabies is- (a) Permethrin; (b) Lindane; (c) Ivermectin; (d) Corticosteroids
- e) The term eczema is synonymous with the term- (a) Allergy; (b) Dermatitis; (c) Psoriasis; (d) Scabies
- f) The causative agent of COVID 19 is- (a) SARS-CoV; (b) SARS-CoV 2; (c) HIV; (d) H1N1
- g) Random plasma glucose of individual with diabetes will be- [(a) ≥ 250 mg/dl; (b) ≥ 125 mg/dl ; (c) ≥ 200 mg/dl ; (d) ≥ 300 mg/dl
- h) An important biomarker of diabetes mellitus is- (a) PAF; (b) PGEs; (c) HbA1c; (d) TNF
- i) Chemosis is a sign of - (a) skin diseases; (b) eye irritation; (c) inflammation; (d) fever
- j) Chronic deep sadness is a condition in depression termed as- (a) psychosis; (b) anhedonia; (c) melancholia; (d) anxiety
- k) Zollinger Ellison Syndrome is related to- a) Peptic ulcer; b) Stroke; c) Alzheimer's disease; d) Parkinson's disease.
- l) The sexual stage of malarial parasites occurs in- (a) mosquito; (b) human liver; (c) erythrocytes; (d) all of the above

B. Fill in the blanks (any ten)

1×10

- a) "Embolism" is defined as _____.
- b) The full form of CABG is _____.
- c) Full form of NLEM is _____.
- d) Scabies is a contagious parasitic disease caused by the mite _____.
- e) The full form of MDR-TB is _____.
- f) Cholesterol in the body is produced by _____.
- g) _____ is a gram-negative bacteria responsible for gastric and duodenal ulcers.
- h) AFB test is done for detection of _____.
- i) Graves & Goitre are disease of _____.
- j) Causative organism of Gonorrhoea is _____.
- k) Serum concentration range of total cholesterol is _____.
- l) T3 and T4 refer to _____.

2. Answer any 10 (Ten) questions from the following:

3×10

- a) Define polypharmacy. Write the advantages of standard treatment guidelines. (1+2)
- b) What is rational use of medicine? What are the leading factors provoked the need of it. (1.5+1.5)
- c) Explain the non-pharmacological treatment of dysmenorrhoea and premenstrual syndrome. (3)
- d) Classify different types of pneumonia. What is atherosclerosis? (2+1)
- e) Write about the risk factors and aetiology of UTI. (3)
- f) Define psoriasis, scabies and eczema. (3)
- g) Classify and explain various types of Ulcerative colitis. (3)
- h) Differentiate between hepatitis A, B, C, D, E. (3)
- i) What are the various clinical manifestation of polycystic ovary syndrome (PCOS). (3)

- ~~j)~~ Write about the diagnosis and clinical manifestations of tuberculosis. (1.5+1.5)
- ~~k)~~ Define the term delusions, hallucination and schizophrenia. (3)
- ~~l)~~ Explain non pharmacological management of depression. (3)
- ~~m)~~ Classify various types of glaucoma. (3)

3. Answer any 6 (Six) questions from the following:

5×6

- a) Elaborate the life cycle of malaria parasite. What is the aetiology of syphilis and AIDs? (3+2)
 - ~~b)~~ Write the risk factors and etiopathogenesis of alcoholic liver disease. (2.5+2.5)
 - c) Explain different anaemias on the basis of pathophysiology and morphology with its treatment. (5)
 - ~~d)~~ Differentiate between Angina and Myocardial infarction based on their etiopathogenesis, clinical manifestation and treatment. (5)
 - ~~e)~~ Name the instruments used to measure blood pressure. Discuss about the various antihypertensive drugs with their standard dose. (1+4)
 - f) What is AMR? Discuss the various mechanism of Antimicrobial Resistance. (1+4)
 - ~~g)~~ What is congestive heart failure (CHF)? Elaborate the pharmacological treatment of CHF. (5).
 - h) Define the term hyperlipidaemia. Explain the pathophysiology of hyperlipidaemia, mentioning the different biomarkers in lipid profile test (LPT). (5)
 - ~~i)~~ Explain the non-pharmacological and pharmacological management of all types Diabetes.
 - ~~j)~~ Explain the aetiology and non-pharmacological management of HIV and COVID 19.
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August 2025

HOSPITAL & CLINICAL PHARMACY

Time Allowed: 3 Hours

Full Marks: 80

Answer all Questions as directed

1. A. Answer any Ten from the followings

- a) Write the English meaning of t.i.d. 1×10
- b) Write the English meaning of q.i.d. *quater in a day*
- c) Write the English meaning of Nocta.
- d) Write the English meaning of h.s.
- e) Write the English meaning pulvis.
- f) The temperature range for cool storage condition 8-15°C.
- g) How many pharmacists are required in 100 bedded hospitals? 5
- h) Decreased plasma level of TSH is called hypothyroidism.
- i) Which lipid is used in TPN as source of energy? 20-25% of dextrose solution.
- j) Write the Normal range of HbA_{1c}.
- k) What is the normal range of ejection fraction Heart's Left Ventricle? (EFLV)

B. Write the full forms of the followings (any ten)

- a) ICCU
- b) NICU
- c) CUDD
- d) DUDD
- e) SARS
- f) TDM
- g) GRP
- h) OTC
- i) ILR
- j) NFI
- k) FIP

1×10

2. Answer any 10 (Ten) questions from the following:

- a) Write note on disposal method of Radiopharmaceuticals.
- b) Write note on Universal Antidote.
- c) Write short note on EOQ. *Early Order quantity.*
- d) State the significance of SGOT and SGPT level in Human Blood.
- e) Explain the role of PTC in adverse drug reaction.
- f) Write note on Satellite Pharmacy.
- g) Write note on Automated Drug Dispensing System.
- h) Write application of computer Hospital in respect of maintenance patients' record.

3×10

- ~~i)~~ Write the role of pharmacists in GPP. *Good pharmacy practise*
- ~~j)~~ Write note on mobile dispensing unit.
- k) Write note on bed side pharmacy.
- l) Write note on NABH accreditation and role of pharmacist on it.

3. Answer any 6 (Six) questions from the following:

5×6

- a) Write note on Pharmacovigilance.
- ~~b)~~ Write the scope of Clinical Pharmacy.
- ~~c)~~ Write the functions of PTC. *Administration, Education,*
- ~~d)~~ Briefly innumerate Unit Dose Dispensing System (UDDS).
- ~~e)~~ Briefly describe about the distribution of NDPS drug and their storage.
- ~~f)~~ Write note on TPN.
- ~~g)~~ Write on qualification, duties and responsibilities of chief pharmacist.
- h) Describe the details of General Treatment Procedure of Poisoning

August 2025

PHARMAY LAW AND ETHICS

Time Allowed: 3 Hours

Full Marks: 80

Answer all Questions as directed

1. A. Choose the correct alternative (any ten).

1×10

- a) Code of Pharmaceutical ethics is developed by (i) PCI (ii) SCI (iii) Both of PCI and SCI (iv) Govt. of India
- b) Pharmacist in a relation to medical profession (i) Provide professional limitation (ii) Provide clandestine arrangement (iii) liaison with public (iv) all of them
- c) When was the Pharmacy Act passed in India? (i) 1940 (ii) 1945 (iii) 1948 (iv) 1950
- d) What is the primary objective of the Pharmacy Act? (i) To regulate the import and export of pharmaceuticals (ii) To regulate the manufacture and sale of pharmaceuticals (iii) To regulate the practice of pharmacy in India (iv) To regulate the use of pharmaceuticals in India
- e) Which form is required to be filled for obtaining whole sale license? (i) Form-28 A (ii) Form-20 G (iii) Form-44 (iv) Form-46
- f) Who is the authority to issues the drug manufacturing license (i) IPC (ii) CDSCO (iii) AICTE (iv) UGC
- g) When was the Drugs and Cosmetics Act passed in India? (i) 1940 (ii) 1945 (iii) 1948 (iv) 1950
- h) The Indian Pharmacopoeia Commission headquarters is located at (i) Delhi (ii) Mumbai (iii) Hyderabad (iv) Ghaziabad
- i) The first edition of Indian Pharmacopoeia was published in the year (i) 1966 (ii) 1995 (iii) 1950 (iv) 1960
- j) The latest drug price control order was passed on (i) 2012 (ii) 2011 (iii) 2013 (iv) 2014
- k) Government opium factory is situated at – (i) Lucknow (ii) Ghazipur (iii) Kolkata (iv) Srinagar

B. Fill in the blanks (any ten)

1×10

- a) The drugs and Magic Remedies Act were enacted in the year _____.
- b) Bioethics means _____.
- c) National Disaster Act was passed in the year _____.
- d) In retail price calculation, MAPE stands for _____.
- e) Dettol comes under _____ schedule.
- f) FSSAI stands for _____.
- g) Schedule X deals with _____.
- h) NLEM stands for _____.
- i) Labelling conditions for Schedule H drug is _____.
- j) Full form of CDSCO is _____.
- k) The ethics of Pharmacists are prescribed by _____.

2. Answer any 10 (Ten) questions from the following:

3×10

- a) What are the main objectives of the Pharmacy Act?
- b) Mention the offences and penalties under import of drugs
- c) Explain the conditions under which MTP can be legal
- d) Mention the objectives of Food safety and standard act, 2006
- e) Define branded and generic drugs with example.
- f) Describe NABH
- g) Write a short note on 'Pharmacist in relation to his profession'

- ✓ h) Explain the objectives of the Clinical Establishment Act 2010.
- ✓ i) Write short note on illicit traffic as under the NDPS act
- ✓ j) Write the difference between the State Pharmacy Council & Joint State Pharmacy Council
- ✓ k) Write the constitution and function of DCC.

3. Answer any 6 (Six) questions from the following:

5×6

- ✓ a) Note on requirement and function of blood bank.
- ✓ b) What are the composition and function of the Pharmacy Council of India?
- ✓ c) Explain the steps involved in the new drug development process.
- ✓ d) Enlist the functions of CDSCO
- e) What is the full form of NPPA? Give a brief description of NPPA.
- f) Write about Good Regulatory Practice.
- ✓ g) Define Misbranded drugs and spurious drugs.
- ✓ h) What are the functions of the Pharma regulatory bodies?