Pune District Education Association's

Seth Govind Raghunath Sable College of Pharmacy (Poly), Saswad, Dist. Pune.

SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: Pharmaceutics (20111)

Max. Marks- 40

Class- First Year D. Pharm
Date- 15/01/2024

Time- 90 Minutes

Instructions : - 1) All questions are compulsory
2) Draw a neat labeled diagram wherever necessary
3) Black figures to the right indicate full marks

15 Marks

Q.1 Attempt any THREE of the following.

a) Explain principle construction ,working & application of double cone blender with suitable diagram

b) Describe Sugar Coating in details.

c) Explain the principle of Soxhlation Explain the construction, working of Soxhlet apparatus

d) Define Ointment Describe various ointment bases used in preparation of ointment.

15 Marks

Q.2 Attempt any FIVE of the following.

a) Explain hand operated capsule filling machine with the help of neat labelled diagram.

b) Enlist Manufacturing defect of tablet describe any four defect.

c) Differentiate between Wet granulation and Dry granulation

d) Differentiate between Hard gelatin & Soft gelatin capsules.

e) What is creaming?discuss the various factor on which rate of creaming depends.

f) Define emulsifying agent. explain HLB scale for emulsifying agent.

10 Marks

Q.3 Attempt ALL of the following.

a) Lanolin is an example of which of the following ointment bases _____
i)Oleoginous bases ii)Absorption Bases iii)Emulsion bases iv)Water soluble bases

b) Oral Emusion are mostly _____
i)o/w emulsions ii)o/w/o emulsions iii)w/o emulsions iv)w/o/w emusion

c) Leakage from soft gelatin capsules can be caused by
i)Hydrolysis of gelatin at low PH ii)Addision of surfactants iii)addition of PEG iv)All of the above

d)The suitable coating for the medicaments produces severe irritation in the stomach is_____
i)Sugar coating ii) Film coating iii)Enteric Coating iv)Double Coating

e) Liquid-liquid extraction is also known as solvent extraction and _____
i)Solid Phase extraction ii)Leaching iii)Partitioning iv)Adsorption

f)Define the term Mixing.

g)Define Pastes with suitable example.

h)Define Syrup with examples.

i)Define Elixir with examples.

j)Define Filtration with examples.

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SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: Pharmaceutical Chemistry (20112)

Class- First Year D. Pharm   Max. Marks- 40
Date – 16/01/2024   Time- 90 Minutes

Instructions: - 1) All questions are compulsory.
              2) Draw a structure wherever necessary.
              3) Black figures to the right indicate full marks.

Q. 01 Solve any three of the following.   Marks 15

a) Define and classify Antineoplastic agents? Draw structure of 5-Fluorouracil.

b) Draw the structure of Phenytoin & give its chemical name, therapeutic uses, formulations, stability storage condition & popular brand name.

c) Define and classify Antibiotics giving suitable examples. Give structure & uses of Chloramphenicol.

d) Define & classify Antihypertensive agents. Draw structure of Captopril, Give its chemical name, use & brand name.

Q. 02 Solve any five of the following.   Marks 15

a) Define topical agents? Write uses & Pharmaceutical formulations of Boric acid & Bleaching powder.

b) Draw structure & give chemical name, uses & brand name of Dapsone.

c) State what are NSAID's? Give uses & popular brand names of Aspirin.

d) Write uses and popular brand names of Piroxicam or Diclofenac sodium.

e) Draw the structure of propranolol. Give its uses & popular brand name.

f) Define gastrointestinal agents. Classify with examples.

Q. 03 Solve all of the following.   Marks 10

a) Write any two uses of Azithromycin.

b) IUPAC name of Paracetamol is--------

c) Cardiac arrhythmia means disturbance in-----

d) Brand name of Acetyl salicylic acid is -------

e) Captopril is used in treatment of ---------

f) Crocin ® is a popular brand name of ------

g) State whether true or false for Antacids are meant for constipation & Hypoacidity.

h) Select the drug from the following which acts as alkylating anticancer agents.
   i) 5-Fluorouracil   ii) Cyclophosphamide   iii) Doxorubicin   iv) Vincristine

i) Co-trimoxazole is a combination of------

j) The synonym of Calcium carbonate is ----

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SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: Pharmacognosy (20113)

Class- First Year D.Pharm

Max.Marks- 40

Date- 17/01/2024

Time-90 Minutes

Instructions: - 1) All questions are compulsory.

2) Draw a neat labeled diagram wherever necessary.

3) Black figures to the right indicate full marks.

Q.1 Attempt any THREE of the following.   **(15 Marks)**

a) Give principle in detail about Homeopathic system of medicine.

b) Give Synonym, Biological Source, Chemical Constituents of Ephedra and Tea leaves.

c) Define Antimalarial with examples. Give biological source, chemical constituents and therapeutic use of any one drug use as antimalarial.

d) Define and classify volatile oil with example. Describe extraction processes of Volatile Oil.

Q.2 Attempt any FIVE of the following.   **(15 Marks)**

a) Discuss quantitative test for Alkaloid in detail.

b) Define herbal formulation, classify with suitable examples.

c) Differentiate between sutures and ligatures. Write ideal requirements of sutures.

d) What arr glycosides. Classify glycosides on the basis of linkage.

e) Explain identification test for Black catechu.

f) Describe method of preparation of Bhasma & Leha.

Q.3 Attempt ALL of the following.   **(10 Marks)**

a) Define Gutika.

b) Silk contains a protein known as _____

c) _____ test is done for identification of Tropane alkaloid.

   i) Swelling factor, ii) Millions' test, iii) Vitali Morin Test, iv) Catechine test

d) Write families for which drug belongs: i) Hyoscymus, ii) Myrobalan.

e) Enlist different traditional systems of medicine.

f) Indian Bdellium Gum is synonym for; i) Myrrh, ii) Asafoetida, iii) Guggul, iv) Acacia

g) Mention drugs belonging to families: i) Labiatae, ii) Liliaceae

h) Write examples of: i) Plant Fiber, ii) Mineral Fiber

i) Terminalia tomentosa is adulterant of _____ bark.

j) Ayurveda is derived from two Sanskrit words _____ & _____.

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SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: -Human Anatomy & Physiology (20114)

Class: - F.Y.D.Pharm.   **Maximum Marks: -** 40
Date: - 18/1/2024   **Time: -** 90 Minutes

Instructions: - 1. All questions are compulsory.
                    2. Illustrate your answers with neat sketches wherever necessary.
                    3. Black Figures to the right indicate full marks

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Q.1) Attempt any THREE of the following. (Long Answer Questions)   **(15 marks)**
   a) What is Portal circulation? Give its importance. Give events of cardiac cycle.
   b) Describe in detail Mechanism and Physiology of respiration.
   c) List out endocrine glands with their location. Give hormones secreted by pituitary gland
      with their physiological role.
   d) Classify joints with examples.

Q.2) Attempt any FIVE of the following. (Short Answer Questions)   **(15 marks)**
   a) Distinguish between artery and vein.
   b) Enlist the functions of skin. How skin maintains our body temperature.
   c) Draw a well labeled diagram of an Ear
   d) Define Skeleton with its functions.
   e) Define with Volume- Tidal Volume and vital Capacity
   f) Draw a well labelled diagram of Respiratory system.

Q.3) Solve the following multiple choice questions.   **(10 marks)**
   a) .... is a leaf shaped cartilage in larynx.

   b)............is an Exocrine as well as Endocrine gland.

   c) Define Joint.

   d) --------- is the strongest and largest bone of our body.

   e) The ventricular walls have little muscle projections is known as------

   f) Two lower chamber of Heart is called as -------

   g) Define Pneumonia.

   h) Name the bones of vertebral column.

   i) Elbow joint is a type of -------------

   j) The average breathing rate is --------- breathes per minute.

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SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: Social Pharmacy (20115)

Class- First Year D. Pharm
Date – 19/01/2024

Max.Marks- 40
Time- 90 Minutes

Instructions: - 1) All questions are compulsory.
2) Draw a neat labeled diagram wherever necessary.
3) Black figures to the right indicate full marks.

Q. 01 Solve any three of the following.   Marks 15

a) Enlist various respiratory infection. Give causative agent, mode of transmission, signs and symptoms, prevention and control of Rubeola.
b) What is fortification of food? Enlist with example types of food fortification.
c) Write in detail about the disease : Acute diarrheal disease.
d) Define GMF. Write Advantages and disadvantages of GMF.

Q. 02 Solve any five of the following.   Marks 15

a) Define the term epidemiologist .Enlist any two applications of epidemiology.
b) Give causative agent,mode of transmission, incubation period of :
    i) AIDS   ii) Dengue   iii) Leprosy
c) Define the term i) Adulteration   ii) Malnutrition   iii) Artificial ripening
d) What is the role of pharmacist involved in community healthcare system.
e) Write classification of food.
f) Write a note on food poisoning.

Q. 03 Solve all of the following.   Marks 10

a) Define the term nutraceutical.
b) Whooping cough is also known as _____
c) Kwashiorkor and Marasmus are deficiency diseases of _____.
d) D.O.T.S stands for?
e) What is gram negative and gram positive bacteria?
f) Write classification of Carbohydrate.
g) Which of the following is not arthropod borne disease.
 i) Plague ii) Malaria iii) Syphilis iv) Filariasis
h) What is pandemic?
i)Enlist any two ill effects of junk food.
j) The causative agent of Chikungunya is ___

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SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: Pharmacology (20221)

Class- Second Year D. Pharm   Max.Marks- 40
Date – 15/01/2024   Time- 90 Minutes

Instructions: - 1) All questions are compulsory.
2) Draw a neat labeled diagram wherever necessary.
3) Black figures to the right indicate full marks.

Q. 01 Solve any three of the following.   Marks 15

a) Define and classify "Antihypertensive"
b) What is anesthesia? Explain stages of mechanism of action of anesthesia.
c) Write a note on 'benzodiazepines as a hypnotics and sedatives.
d) What is peptic ulcer? Define and classify antiulcer drugs with examples.

Q. 02 Solve any five of the following.   Marks 15

a) Write a note on oral anticoagulants.
b) Explain glyceryl trinitrate as an antianginal agent.
c) Define and classify bronchodilators with examples.
d) Give all pharmacological aspect Digitalis.
e) Write a note on MAO inhibitors.
f) Define and classify antiemetic's with examples.

Q. 03 Solve all of the following.   Marks 10

a) _____ is called as Largactil.
b) What is haemophilia?
c) Antiplatelet agents also knows as _____.
d) Glyceryl trinitrate is _____drug.
e) Define bronchial asthma.
f) Give one example of synthetic narcotic analgesic.
g) Bromhexine is _____
   i) Mucolytic agents, ii) Anti-emetics, iii) Expectorants, iv) Antacids
h) Define arrhythmia.
i) Ranitidine & cimetidine are the _____.
j) PPIs means_____.

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Seth Govind Raghunath Sable College of Pharmacy (Poly), Saswad, Dist.-Pune.
SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: Community Pharmacy and Management (20222)

Class- Second Year D. Pharm   Max.Marks- 40
Date – 16/01/2024   Time- 90 Minutes

Instructions: - 1) All questions are compulsory.
2) Draw a neat labeled diagram wherever necessary.
3) Black figures to the right indicate full marks.

Q. 01 Solve any three of the following.   Marks 15

a) Define Communication. Write a note on interaction with professionals.
b) Enlist factors influencing non-adherence. Explain the role of pharmacist in medication non-adherence
c) Explain the legal requirements to set up a retail pharmacy.Draw layout of Pharmacy.
d) Explain EOQ analysis. Draw suitable diagram for CRM.

Q. 02 Solve any five of the following.   Marks 15

a) Explain types of medication non-adherence.
b) Discuss any ten site selection requirements to establish community pharmacy.
c) Draw and explain any two types of cash book.
d) What are the consequences of non-compliance?
e) Enlist and define the principles of communication.
f) Give four advantages and four disadvantages of online pharmacy.

Q. 03 Solve all of the following.   Marks 10

a) Find the odd term from the following
i) Communication ii) Counseling iii) Consulting iv) Contraindications
b) Give the full form of FIFO and LIFO.
c) What is Case presentation?
d) What is medication adherence?
e) Which of the following terms best explain the total cost required to hold the inventory
i) Conversion cost ii) Carrying cost iii) Production cost iv) Purchase cost
f) Define the term 'Vendor Audit.
g) Write about any one EOQ analysis method.
h) Which of the following is responsible for non-adherence
i) Cultural attitudes ii) Polypharmacy iii) Refill failure iv) Pathological findings
i) Define Non-Verbal communication.
j) Which of the following is not an alternative (or synonym) of community pharmacy in India.
i) Pharmacy   ii) Retail Pharmacy   iii) Chemist and Druggist   iv) Internet Pharmacy

Institute Code-0231   Roll No. [   ]

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Seth Govind Raghunath Sable College of Pharmacy (Poly.), Saswad, Dist. – Pune.
SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: Biochemistry & Clinical Pathology (BCT)   Subject Code-20223
Class- Second Year D.Pharm   Max. Marks- 40
Time- 90 Min   Date- 17/01/2024

Instructions: - 1) All questions are compulsory.
  2) Draw a neat labeled diagram wherever necessary.
  3) Black figures to the right indicate full marks.

Q.01) Attempt any THREE of the following.   (15 Marks)

  a) Give details & schematic presentation of β-oxidation of fatty acid.
  b) Enlist factors affecting rate of enzyme catalyzed reaction. Explain in detail effect of Temperature pH & Concentration of enzyme with the help of curves.
  c) Give details & schematic presentation of Urea cycle.
  d) Define the following terms:-
      i) Acid value   ii) Iodine value   iii) Saponification value
      iv) Co-enzyme   v) Inductive enzyme

Q.02) Attempt any FIVE of the following.   (15 Marks)

  a) Explain theories of enzyme mechanism of action with suitable diagram.
  b) Explain the secondary structure of protein with appropriate diagram.
  c) Define Biotechnology. Give its applications & drawbacks.
  d) Write the pharmaceutical applications of enzymes.
  e) Explain the role of lipids in biological membrane (Fluid mosaic model) with diagram.
  f) Draw structure of DNA & enumerate its functions.

Q.03) Attempt ALL of the following.   (10 Marks)

  a) Differentiate between Fats & oil.
  b) Write the components of Nucleotide.
  c) Draw structure of Cholesterol.
  d) Enlist the functions of RNA.
  e) What is Transamination?
  f) Enlist the deficiency diseases of protein.
  g) The general chemical test for amino acid is---
      i) Molisch's test   ii) Biuret test   iii) Ninhydrin test   iv) Fehling's test
  h) Define denaturation of proteins.
  i) Draw structure of Arachidonic acid.
  j) The following is the division of Biotechnology.
      i) White   ii) Green   iii) Red   iv) All of the above

PUNE DISTRICT EDUCATION ASSOCIATION'S
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Seth Govind Raghunath Sable College of Pharmacy (Polytechnic), Saswad, Pune

SECOND SESSIONAL THEORY EXAMINATION 2023-24

Class: -.S.Y.D.Pharm.   **Subject: Pharmacotherapeutics (20224)**

Date: - 18/01/2024   **Maximum Marks: - 40**

   Time: - 90 Minutes

Instructions: - 1. All questions are compulsory.
   2. Black Figures to the right indicate full marks

Q.1) Solve any THREE of the following. (Long Answer Questions)   **(15 marks)**

   a) Define Diabetes mellitus. Give the etiopathogensis, Clinical manifestations and Pharmacological and Non pharmacological treatment of Diabetes mellitus.

   b) What is Rheumatoid Arthritis? Give the etiopathogensis, Clinical manifestations and Pharmacological and Non pharmacological treatment of Rheumatoid Arthritis

   c) Define stroke. Give the etiopathogensis, Clinical manifestations and Pharmacological and Non pharmacological treatment of stroke.

   d) What isPeptic ulcer? Give the etiopathogensis, Clinical manifestations and Pharmacological and Non pharmacological treatment of Peptic ulcer.

Q.2) Solve any FIVE of the following. (Short Answer Questions)   **(15 marks)**

   a) Write a note on hypothyroidism.

   b) What is osteoarthritis.Comment on etiopathogenessis of Osteoarthritis?

   c) Discuss the types of Epilepsy.

   d)What is GERD? Discuss its etiopathogenesis and risk factors.

   e) Explain various mechanisms of resistance to antimicrobial agent.

   f) Give clinical manifestations and Pharmacological treatment of Parkinson's disease.

Q.3) Solve the following multiple choice questions.   **(10 marks)**

   a) Define Alcoholic Liver Disease.

   b) Gestational diabetes occurs   during----------

   c) Tonic Clonic seizure is known as-----

   d) -----------infection is the common cause of peptic ulcers.

   e) --------------is the Primary disease of cartilage.

   f) The another name of stroke is-------

   g) Ulcerative colitis & Crohn's disease are the types of ---------

   h) Thyroid hormone regulate---------

   i) Define Antimicrobial resistance.

   j) ----------- is associated with overproduction of stomach acid.

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Seth Govind Raghunath Sable College of Pharmacy (Poly), Saswad, Dist.-Pune.

SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: Hospital & Clinical Pharmacy (20225)

Class- Second Year D.Pharm

Date- 19/01/2024

Max.Marks- 40

Time- 90 Minutes

Instructions: - 1) All questions are compulsory.
2) Draw a neat labeled diagram wherever necessary.
3) Black figures to the right indicate full marks.

Q.1 Attempt any THREE of the following.   **15 Marks**

a) Discuss in detail about the floor stock dispensing system, with its advantages & disadvantages.

b) Define Ward Round Participation, Write the goal and procedure of WRP by clinical pharmacist.

c) Define DIC & PIC, write the various sources of drug information with explanation.

d) What is IV incompatibility, describe consequences and various types of IV admixture incompatibilities.

Q.2 Attempt any FIVE of the following.   **15 Marks**

a) Define drug related problems & classify it.

b) Give Definition, content and indication for use of TPN.

c) Comment on Automated drug dispensing systems.

d) What is pharmaceutical care, describe its element.

e) Define radiopharmaceuticals, Explain methods of radiopharmaceutical disposal.

f) Enlist different software's used in pharmacy & explain pharmacy management software.

Q.3 Attempt ALL of the following.   **10 Marks**

a) Define Bulk Compounding.

b) TPN is administered by: i) IV, ii) IM, iii) Subcutaneous, iv) Oral

c) A single unit package is one which contains one complete pharmaceutical dosage form is_____ .
   i) Pill, ii) Tablet, iii) Capsule, iv) All of above

d) Define IV admixture, Give its types.

e) _____ is a special vocabulary used by health care professionals for effective and accurate communication. i) Term, ii) Medical Terminology, iii) Definition, iv) Phrase

f) What are is meanings of: i) Auristillae, ii) Pulvis.

g) The hospital radioactive waste is mostly composed of _____.
   i) High level, ii) Low level, iii) Medium & low level, iv) Medium level

h) Radiopharmaceuticals are usually stored: i) 2° C, ii) 8° C, iii) 25° C, iv) 0° C

i) What are functions of EHR.

j) Define Patient Compliance.

Roll No.

SECOND SESSIONAL THEORY EXAMINATION 2023-24

Subject: Pharmacy Law & Ethics (20226)

Class- Second Year D. Pharm

Date – 20/01/2024

Max. Marks- 40

Time- 90 Minutes

Instructions: - 1) All questions are compulsory.

2) Draw a neat labeled diagram wherever necessary.

3) Black figures to the right indicate full marks.

Q. 01 Solve any three of the following.　　　　　　　　　　**Marks 15**

a) Discuss the qualification & Duties of Drug Inspector as per Drugs & Cosmetics act, 1940.

b) Define illicit traffic. Write the Offences & penalties under Narcotic drugs & Psychotropic Substance act, 1985.

c) Discuss the various functions of CDL as per Drugs & cosmetics act, 1940.

d) What is biomedical Waste? Explain methods of disposal of biomedical waste.

Q. 02 Solve any five of the following.　　　　　　　　　　**Marks 15**

a) Discuss the qualification of Government analyst.

b) Define Food Authority. Give the duties & functions of Food Authority.

c) State in detail provisions Schedule N of Drug & Cosmetics rules 1945.

d) Discuss certain operations controlled by the Central Government, under NDPS act, 1985

e) What are the functions of National Council for Clinical Establishment?

f) Define the term under D & C act, 1940 i) Adulterated Drug ii) Misbranded Drugs

Q. 03 Solve all of the following.　　　　　　　　　　　　**Marks 10**

a) FSSAI stands for_____

b) Indian Veterinary Research Institute is situated at _____

c) The main objectives of the consumer organization is to protect the interest of the ----

　　　i) Consumer　　　ii) trader　　　iii) Producer　　　iv) manufacturer

d) Define Drug Store.

e) Out of 22 members of the Food Authority, the proportion of women is---

f) -------is celebrated as World Consumer day.

g) Head office of Food Authority is at? i) Chennai　ii) Mumbai　iii) Dehradun iv) Delhi

h) ------is the highest authority to settle to consumer dispute under act.

i) Animal anatomical waste are categorized under which category of biomedical waste.

j) Lung Ventilators are classified under which class of medical devices.

　i) Class B　ii) Class A iii) Class C　iv) Class D

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