

0811

21718

3 Hours / 80 Marks

Seat No.

--	--	--	--	--	--	--	--	--	--

- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Use of Non-programmable Electronic Pocket Calculator is permissible.
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any EIGHT of the following: 16
- Define:
 - Prescription
 - Paste
 - Calculate dose of Paracetamol for 4 yr child and whose Adult dose is 500 mg.
 - Differentiate between suppositories and pessories.
 - Mention four qualities of an ideal lipstick.
 - Give reason: Why oily vehicle is not used in the preparation of nasal drops.
 - Write advantages of parenteral preparations.

P.T.O.

- g) Translate following Latin terms in English.
 - (i) Jentaculum
 - (ii) Cochleare maxium
 - (iii) Omni quarta hora
 - (iv) Dolare urgente
- h) Differentiate between Ointment and Paste.
- i) Describe adjusted incompatibility with example.
- j) Prepare 1 lit solution 1 in 4000 using 0.1% w/v solution.

2. Attempt any FOUR of the following:

12

- a) Define and classify jellies.
- b) Give advantages of suppositories. Discuss any two new trends of suppositories.
- c) Enlist tests for identification of emulsion type. Explain any one with neat diagram.
- d) Explain any three Therapeutic incompatibility.
- e) Define powder. How will you dispense powders containing.
 - (i) Potent drugs
 - (ii) Hygroscopic and Deliquescent drugs.
- f) What are Pyrogens? Write a note on BET.

3. Attempt any FOUR of the following:

12

- a) List the factors that influence dose of drug. Explain any two.
- b) Classify different facial cosmetics. Mention four qualities of a good face powder.
- c) What are effervescent granules? Why they are prepared? Explain any one method for preparation.
- d) Define Mixtures. How you will dispense mixture containing precipitate forming liquids?

- e) Write in brief about different parts of prescription.
f) Comment on following prescription

Rx

Quinine sulphate	1.5 g
Dil. Sulphuric Acid	4.0 ml
Potassium Iodide	8.0 gm
Water q.s.	200 ml

4. Attempt any FOUR of the following: 12

- a) Define Shampoos. Describe the formulation of shampoos.
b) Define cachets, explain its types and write disadvantages of it.
c) Mention essential characteristics of different ophthalmic products. Explain any two in brief.
d) Find the quantity of sodium chloride required to yield a solution iso-osmotic with blood plasma of procain HCl 1.5% w/v.
(Given F.P. of 1% w/v procain HCl = -0.122°C)
e) Discuss in brief processing of parenteral preparations.
f) In what proportion should 12%, 10% and 6% ointment be mixed in order to obtain 20 gms of 8% ointment.

5. Attempt any FOUR of the following: 12

- a) Define
(i) Epilation
(ii) Depilation. Mention any four qualities of an ideal depilatory agent.
b) Differentiate between flocculated and deflocculated suspension.
c) Define Dentifrices and explain the formulation additives used in dentifrices with examples.
d) Give significance of particulate matter monitoring and explain any two methods for particulate matter monitoring.

- e) Classify ointment base with one example each. Give disadvantages paraffins base.
- f) Prepare and dispense the Iodoform suppository

Rx

Iodoform 0.9 gm

Coca butter q.s.

Make the suppositories

Send 8 suppositories of 2 gm each.

Note: Displacement value of Iodoform is 4.0

6. Attempt any FOUR of the following: **16**

- a) Define emulsion and classify polysaccharide emulsifying agents with one example each and list the disadvantages of it.
- b) Mention qualities of ideal suspension. Explain any two methods used for evaluation of physical stability of suspension.
- c) Define suppository. Explain cold compression method for preparation of suppository.
- d) Give a brief account of eye makeup cosmetics with ideal qualities of eye make up preparations.
- e) Classify monophasic liquid dosage forms. Mention any three advantages of syrups and give reason why glycerin is used as vehicle in preparation of Throat paint.
- f) Define cracking. Explain any six factors responsible for cracking.
-

0812

21718

3 Hours / 80 Marks

Seat No.

--	--	--	--	--	--	--	--	--	--

- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Assume suitable data, if necessary.
(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. **Attempt any EIGHT of the following:** **16**
- a) Draw structure with numbering (any two)
- (i) Pyrazole
 - (ii) Phenothiazine
 - (iii) Piperazine
- b) Write structure of the following organic groups (any two)
- (i) Allyloxy
 - (ii) Acetyl
 - (iii) Amido
- c) Name the drug present in the following brands. (any two)
- (i) Ecosprin
 - (ii) Stemetil
 - (iii) Valium

P.T.O.

- d) Classify local Anaesthetics with examples.
- e) Give two brand names for each of the following drugs (any two):
 - (i) Paracetamol
 - (ii) Metformin
 - (iii) Metronidazole
- f) In what dosage form the following drugs are administered?
 - (i) Tolnaftate
 - (ii) Insulin
- g) Write names of four fat soluble vitamins.
- h) Write uses of following: (any two)
 - (i) Evans blue
 - (ii) Iopanoic acid
 - (iii) Fluorescein sodium
- i) Define coagulants and anticoagulants.
- j) Draw two structures of drug containing pyrimidine ring.
- k) Give structure and uses of Haloperidol.
- l) Name the drug used for (any two)
 - (i) Glaucoma
 - (ii) Asthma
 - (iii) Amoebiasis

- 2. Attempt any FOUR of the following:** **12**
- a) Classify Antiseptics and Disinfectants. Draw structure of chlorocresol.
 - b) Define and classify Anti-depressants with examples. Draw structure of Imipramine.
 - c) What are cardiotoxic agents? Name any two cardiac glycosides and give their hydrolysis products.
 - d) Give structure and use of propranolol and Pethidine.
 - e) Give properties, uses and official preparations of clofibrate.
 - f) Define and classify NSAID with examples.
- 3. Attempt any FOUR of the following:** **12**
- a) Define Analeptic. Give structure and chemical name of caffeine.
 - b) Classify Adrenergic drugs. Draw structure of Isoprenaline.
 - c) Give name, structure and properties of sulphonamide used for treatment of eye infection.
 - d) What is leprosy? Give structure and uses of Dapsone.
 - e) Classify Antibiotics according to chemical structure with examples.
 - f) What is epilepsy? Classify Anti-convulsant drugs with examples.
- 4. Attempt any FOUR of the following:** **12**
- a) Classify Hypnotics and sedatives. Draw structure of Phenobarbitone.
 - b) Give structure, properties and uses of Atropine.
 - c) What are Antihypertensive drugs? Classify them with examples.
 - d) What are vitamins? Name four water soluble vitamins with their deficiency symptoms.
 - e) What do you know about adrenocortical hormones? Give uses and official preparations of Hydrocortisone.
 - f) Write structure, chemical name and uses of Penicillin V.

- 5. Attempt any FOUR of the following:** **12**
- a) Define and classify Antineoplastics with examples.
 - b) Classify Hypoglycaemic agents with examples. Give structure of Phenformin.
 - c) Give structure, chemical name and uses of Thyroxin.
 - d) What is co-trimoxazole? Give uses and brand names of Co-trimoxazole.
 - e) Give medicinal uses of :
 - (i) Isoniazid
 - (ii) DEC
 - (ii) Quinine sulfate
 - f) Give structure, chemical name and uses of Ethambutol.
- 6. Attempt any FOUR of the following:** **16**
- a) Draw structure from given chemical name:
 - (i) 2-bromo-2-chloro-1,1,1 trichloro ethane
 - (ii) 2-diethyl aminoethyl-4- amino-benzoate
 - (iii) 5,5 diphenyl imidazolidine 2, 4-dione
 - (iv) 4-butyl-1,2-diphenyl pyrazolidine-3,5-dione
 - b) Differentiate between general and local anaesthetics. Draw structure of Procaine or Lignocaine.
 - c) Classify the Antimalerials with examples. Draw structure of chloroquine with its chemical name.
 - d) What is Histamine? Define and classify Antihistamines with examples. Draw structure of chlorpheniramine.
 - e) What are sex hormones? Give properties, uses and official preparations of testosterone.
 - f) Define Diuretics. Classify them with examples. Give structure of furosemide.
-

0813

21718

3 Hours / 80 Marks

Seat No.

--	--	--	--	--	--	--	--	--	--

- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Figures to the right indicate full marks.
(4) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Define any EIGHT of the following terms with two examples each:

16

- a) Mydriatics
- b) Purgatives
- c) Diuretics
- d) Sympathomimetics
- e) Contraceptives
- f) Antiemetics
- g) Narcotics
- h) Antiseptics
- i) Plasma expander
- j) Antibiotics

P.T.O.

2. Attempt any FOUR of the following:**12**

- a) What are parenteral route of administration? Give its advantages and disadvantages.
- b) Define drug absorption. Explain various process of drug absorption.
- c) Define and classify sedative and hypnotics with suitable examples.
- d) Discuss mode of action and therapeutic uses of sympatholytics.
- e) Write the pharmacological actions of quinine.
- f) What is tuberculosis? Explain chemotherapy of tuberculosis.

3. Attempt any FOUR of the following:**12**

- a) Mention any one drug contraindicated in:
 - (i) Hyperacidity
 - (ii) Head injury
 - (iii) Insomenia
 - (iv) Liver damage
 - (v) Constipation
 - (vi) Pregnancy
- b) Give the dose of following drugs:
 - (i) Aspirin
 - (ii) Morphine hydrochloride
 - (iii) Ibuprofen
 - (iv) Dapsore
 - (v) Ranitidine
 - (vi) Castor oil
- c) Name the drug of choice in following conditions:
 - (i) Anxiety
 - (ii) Schizophrenia
 - (iii) Gout
 - (iv) Glaucoma
 - (v) Raynaud's disease
 - (vi) Pernicious anemia

- d) Write route of administration of following drugs:
- (i) Diazepam
 - (ii) Mannitol
 - (iii) Mebendazole
 - (iv) Nitroglycerin
 - (v) Insulin
 - (vi) Heparin
- e) Name one drug each which produces following effects:
- (i) Anaphylaxis
 - (ii) Cinchonism
 - (iii) Grey baby syndrome
 - (iv) Anaphylaxis
 - (v) Bone and teeth deformity
 - (vi) Agranulocytosis
- f) Mention Antidote with its mechanism in case of poisoning due to:
- (i) Barbiturates
 - (ii) Heavy metals
 - (iii) Digitalis

4. Attempt any FOUR of the following:

12

- a) Define and classify Haematinics with examples.
- b) Define autocoids. What is triple response of histamines?
- c) Discuss mode of action of diuretic drugs.
- d) Define local anaesthetics. Classify with example.
- e) Mention different types of tumors. How cancer is treated in different ways?
- f) Give symptoms and treatment for organophosphorus compound poisoning.

5. Attempt any FOUR of the following:**12**

- a) What is sublingual route of administration? Give its advantages and disadvantages.
- b) Define and classify antihypertensives with examples.
- c) What is diabetes? Differentiate between sulfonyl ureas and biguanides.
- d) Classify non steroidal anti inflammatory drugs.
- e) Define and classify synergism with examples.
- f) What is parkinsonism? Give its treatment.

6. Give reasons for any FOUR of the following:**16**

- a) Why toxicity studies are carried out on all medicines?
 - b) Aspirin is not given in peptic ulcer.
 - c) Cheese and butter is contraindicated during MAO inhibitor therapy.
 - d) Chloremphenicol therapy is supplemented with iron preparation.
 - e) Lactobacillus is given with some antibiotics.
 - f) Aluminium hydroxide and magnesium hydroxide are given in combination.
-

00814

21718

3 Hours / 80 Marks

Seat No.

--	--	--	--	--	--	--	--	--

- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Answer as per latest amendments.

Marks

1. Answer any EIGHT of the following :

16

- (a) Give the objective of Pharmacy Act, 1948.
- (b) Define Poison. Give the objective of Poison Act, 1919.
- (c) Give any two recommendations of DEC.
- (d) Define 'Law' and 'Ethics' as per code of pharmaceutical ethics.
- (e) What does Schedule-J and Schedule-P prescribe as per D and C Act, 1940 ?
- (f) What is the purpose of DPCO ?
- (g) Define minor and guardian as per Medical Termination of Pregnancy Act, 1971.
- (h) Define cosmetic as per D and C Act, 1940.
- (i) What are the objectives of Drug and Magic Remedies Act, 1954 ?
- (j) Give any four examples of Schedule-X drugs.
- (k) Define registered pharmacist as per Pharmacy Act, 1948.
- (l) Which additional particulars should appear on the label of Schedule-X drugs as per D and C Act ?

2. Answer any FOUR of the following :**12**

- (a) Define education regulation. What it prescribes ?
- (b) What are the functions of PCI as per Pharmacy Act, 1948 ? (any three)
- (c) Define :
 - (i) Magic remedies and
 - (ii) Advertisement as per DMR Act, 1954.
- (d) How retail price of the formulation is calculated as per DPCO ?
- (e) What is the role of pharmacist in relation to his profession, as per code of ethics ?
- (f) Enlist the operations controlled by Central Government as per NDPS Act, 1985 (any six).

3. Answer any FOUR of the following :**12**

- (a) Give any six classes of cosmetics which are prohibited to be imported as per D and C Act, 1940.
- (b) What are the bonafide reasons for termination of pregnancies by RMP as per Medical Termination of Pregnancy Act, 1971 ?
- (c) Differentiate between bonded and non-bonded laboratory as per Medicinal and Toilet Preparation (E.D.) Act, 1955. (any three points)
- (d) Write the qualifications of Drug Inspector as per D & C Act, 1940.
- (e) Under what conditions the name of pharmacist is removed from the register as per Pharmacy Act, 1948 ?
- (f) Give any three offences and respective penalties in relation to Medical Termination of Pregnancy Act, 1971.

4. Answer any FOUR of the following :**12**

- (a) What are various offences and penalties under Pharmacy Act, 1948 ? (any three)
- (b) Mention the classes of advertisements which are exempted under DMR Act, 1954. (any six)
- (c) Explain the role of pharmacist in health care system.
- (d) Define pharmacy, chemist and druggist and drug store as per D & C Act, 1940.
- (e) Give the objective of Medicinal and Toilet Preparation Act, 1955 and define toilet preparation as per Medicinal & Toilet Preparation Act, 1955.
- (f) How pharmacist should handle the prescription as per the code of pharmaceutical ethics ?

5. Answer any FOUR of the following :**12**

- (a) Give the functions of CDL as per D & C Act, 1940 (any six).
- (b) Enlist qualifications for entry on the first register under Pharmacy Act, 1948.
- (c) List the facilities provided for and 'Approval of places for termination of pregnancy' under M.T.P. Act, 1971.
- (d) What are the various labelling requirements for ophthalmic preparations as per D & C Act, 1940 ?
- (e) Describe Schedule N in brief as per D and C Act, 1940.
- (f) Define :
 - (i) Dutiable goods as per M.T.P. (E.D.) Act, 1955.
 - (ii) Restricted preparation as per Medicinal and Toilet Preparation Act, 1955.

P.T.O.

6. Answer any FOUR of the following :**16**

- (a) Give ex-officio members of DTAB.
 - (b) Explain essential requirements of Bonded Laboratory.
 - (c) Define 'Drug Inspector' and 'Government Analyst' as per D & C Act, 1940.
 - (d) Give the duties of Drug Inspector in relation to sale of drugs and cosmetics as per D and C Act, 1940.
 - (e) Enlist any four offences and penalties for same as per Medicinal and Toilet Preparation Act, 1955.
 - (f) Define 'Bulk drugs' under DPCO. Explain in brief about Drug Price Equalisation Account.
-

00815

21718

3 Hours / 80 Marks

Seat No.

--	--	--	--	--	--	--	--	--

- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Figures to the right indicate full marks.
 - (4) Assume suitable data, if necessary.
 - (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Solve any EIGHT of the following :

8 × 2 = 16

- (a) Mention four disadvantages of opening a drug store in a big city.
- (b) Define Economics. State various elements of Economics.
- (c) Define Budget. What is Budgetary control ?
- (d) Write the different methods of storage of drugs in a drug store.
- (e) Define Bank. Enlist different types of banks.
- (f) Define inventory control & write its objectives.
- (g) State various forms of business organization.
- (h) Define finance and enlist various sources to raise long term finance.
- (i) Write formula to calculate the retail price of drug formulation.
- (j) Define scrap. State different types of scrap.
- (k) Explain merchant middlemen.
- (l) Give advantages of advertising.

2. Solve any FOUR of the following :**4 × 3 = 12**

- (a) Define Market Research. Explain survey method of market research.
- (b) State advantages of co-operative society business.
- (c) Describe evaluation system of the pharmacist.
- (d) Explain VED analysis of inventory control.
- (e) Define :
 - (i) Trade
 - (ii) Consumer goods
 - (iii) Management
- (f) Differentiate between a trial balance and a balance sheet.

3. Solve any FOUR of the following :**4 × 3 = 12**

- (a) Explain various objectives of Budgetary control.
- (b) Define :
 - (i) Overdraft facility
 - (ii) Cash credit facility
 - (iii) Discounting of bills
- (c) Differentiate between departmental store & multiple shops.
- (d) Explain the importance of management.
- (e) Define Accounting Concept. Explain money measurement concept and dual aspect concept.
- (f) Define salesmanship. State qualities of a good salesman.

4. Solve any FOUR of the following :**4 × 3 = 12**

- (a) Define Advertisement. Enlist different medias of advertisement.
- (b) Explain maximum stock level, minimum stock level and re-order level.
- (c) Differentiate between Profit and Loss Account and Balance Sheet.
- (d) Explain various legal requirements to start retail drug store.
- (e) Write short note on primary sources of marketing research.
- (f) What is the purpose of giving training to a newly recruited pharmacist ?

5. Solve any FOUR of the following :**4 × 3 = 12**

- (a) What do you mean by mail order business ? Mention its advantages and disadvantages.
- (b) Give the objectives of trial balance. Explain the methods of trial balance.
- (c) Define the master budget. Give detail classification of budget.
- (d) Differentiate between wholesaler & retailer.
- (e) Define the terms :
 - (i) Bad debts
 - (ii) Insolvency
 - (iii) Liabilities
- (f) Define industry. Give detail classification of industry.

6. Solve any FOUR of the following :**4 × 4 = 16**

- (a) What do you mean by Double Entry Book-Keeping System ? State its objective and give principle of the double entry book-keeping system.
- (b) Define joint stock company. State the salient features of the joint stock company.

00815

[4 of 4]

- (c) Define E.O.Q. Mention different methods of E.O.Q.
- (d) Explain the various stages of purchase procedure.
- (e) What are the book of original entry ? Draw the format of journal & ledger.
Explain petty cash book.

From the information given below prepare Profit and Loss Account of M/s. Prem Medicos for the year ending 31st December 2016.

	₹
Gross profit	8000
Salaries	5000
Travelling Expenses	500
Interest received	350
Stationery	500
Discount received	200
Advertisement	450
Rent of shop sublet	100
Office rent	300
Commission received	50
Discount allowed	250

00816

21718

3 Hours / 80 Marks

Seat No.

--	--	--	--	--	--	--	--	--

- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt the followings : (Any EIGHT)

16

- (a) Define the following terms : (any two)
 - (i) Drug dependence
 - (ii) Bioavailability
 - (iii) Patient compliance
- (b) What are surgical dressings ? Write any two ideal properties.
- (c) What advice will you give to patient taking : (any two)
 - (i) Diazepam
 - (ii) MAO inhibitors
 - (iii) Boric acid
- (d) Write the normal values with their significance : (any two)
 - (i) ESR
 - (ii) Blood pressure
 - (iii) Haemoglobin
- (e) What is universal antidote ? Give its composition.

- (f) Mention the suitable method for sterilization of (any two) :
- (i) Sutures
 - (ii) Hand gloves
 - (iii) Surgical dressings
- (g) Give the use of (any two)
- (i) Lumbar puncture needle
 - (ii) Scalpel
 - (iii) ECG
- (h) What is Elite hospital ?
- (i) State the meaning of
- (i) Lithotripsy
 - (ii) Relative Bioavailability
 - (iii) Cholagogues
- (j) Translate following terms into English (any four)
- (i) Auristillae
 - (ii) Capiondus
 - (iii) Nocte
 - (iv) Fortis
 - (v) Unguentum
- (k) Define sterilization. Write the principle of autoclaving.
- (l) Write the composition of PTC.

2. Attempt the followings : (Any FOUR)

12

- (a) Define Hospital. Classify it on the basis of clinical parameter.
- (b) Discuss the alcohol withdrawal symptoms and treatment.
- (c) Write the pathophysiology and manifestations of TB.
- (d) Define DIC. Write sources of drug information.

- (e) What is hospital formulary ? Discuss the contents of hospital formulary.
- (f) Define the following terms : (any three)
 - (i) Etiology
 - (ii) Ischaemia
 - (iii) Phocomelia
 - (iv) Absolute Bioavailability

3. Attempt the followings : (Any FOUR)

12

- (a) Define clinical pharmacy. Describe its scope.
- (b) Define unit dose dispensing ? Discuss UDDS.
- (c) Explain physiological factors affecting on Bioavailability.
- (d) Discuss the methods of estimation of demand.
- (e) Define patient counselling. Discuss the role of pharmacist in patient counselling.
- (f) Differentiate between psychological drug dependence and physical drug dependence.

4. Attempt the followings : (Any FOUR)

12

- (a) Discuss the applications of computer in medication monitoring.
- (b) Write pathophysiology, signs and symptoms of 'Hypertension' **OR** 'Rheumatoid arthritis'.
- (c) Write uses of
 - (i) CT Scan
 - (ii) HEPA
 - (iii) Ryle's tube
- (d) Define and classify ADR.
- (e) Give requirements and list the technical abilities of Hospital Pharmacist.
- (f) Write about Nursing services in a hospital.

P.T.O.

- 5. Attempt the followings : (Any FOUR) 12**
- (a) Define Drug Interaction. Discuss any two drug-food interaction with example.
 - (b) Define and classify Poison.
 - (c) What are the various reasons for ADR.
 - (d) Discuss factors affecting on 'Make or Buy' decision.
 - (e) Explain the drug interactions of the following : (Any two)
 - (i) Folic acid and phenytoin
 - (ii) Diuretics and Antidiabetic agent
 - (iii) Phenyl butazone and warfarin.
 - (f) Discuss floor stock drug distribution system in hospital.
- 6. Attempt the followings : (Any FOUR) 16**
- (a) Describe the following tests for evaluation of parenteral solution :
 - (i) Sterility test
 - (ii) Leaker test
 - (b) What is PTC ? Describe the role of PTC in drug safety.
 - (c) Define drug abuse. How the drug abuse is treated ?
 - (d) What is patient compliance ? Discuss the reasons for patient non-compliance.
 - (e) Give objectives of inventory control. Explain procedure for purchasing.
-