

Registration No :

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Total Number of Pages : 02

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B.Pharm
15PH601

6th Semester Regular / Back Examination 2018-19

PHARMACEUTICS-III

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q CODE : F105

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

The figures in the right hand margin indicate marks.

Part- I

Q1 Only Short Answer Type Questions (Answer All-10) (2 x 10)

- Define the term microencapsulation and give four of its application
- What do you mean by flash point test what is its significance
- What is the principle of fill-O-seal systems workability and How does it ensure sterility
- Define sol-gel-sol system and state its advantages
- Type-I and Type-II glasses are both subjected for water attack test. (True/False)
- Explain the term salting out effect and how does it influence microencapsulation
- What do you mean by the term PMMA and how do they find utility in design of contact lenses
- Define and classify clean rooms based on USP and BP
- How are thermo setting plastics and thermo plastic plastics different
- Give examples of two non aqueous vehicles used in parenteral preparations

Part- II

Q2 Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve) (6 x 8)

- Differentiate between type I and type II glasses
- Naso-lacrimal drainage system influences bio-availability of active principles from ophthalmic delivery systems. Justify
- Illustrate with neat diagram the air suspension technique of microencapsulation
- Explain the layout of a parenteral manufacturing area with a neat diagram
- What are the various parts of an aerosol canister, explain with neat diagram
- Distinguish between all three types of contact lenses with a brief note on each
- Explain the two methods by which sterility testing is carried out as per IP
- What do you mean by the term Iso-tonicity? Explain cryoscopic method for its calculation
- Classify the types of propellants used in manufacturing of aerosols and add a brief note on Roults law of vapour pressure
- What are plastics, write a note on the evaluation of plastics for parenteral and non-parenteral preparations
- Define the process coacervation phase separation and explain how it is utilized in formulating microencapsulated products
- Based on which parameters can evaluation of microencapsulated products done explain

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Signature
Date: 10/11/2020

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

- Q3** 251 What are the steps to evaluate the aerosol products, explain any four of them in detail.
- Q4** 251 What are the various routes of administration of parenteral preparation explain each with suitable diagram
- Q5** 251 Discuss briefly the formulation aspect of ophthalmic preparations
- Q6** 251 Explain briefly the influence of light, temperature, oxygen and water on selection of packing materials

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B.Pharm
15PH602

6th Semester Regular / Back Examination 2018-19

MEDICINAL CHEMISTRY-II

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q CODE: F245

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

The figures in the right hand margin indicate marks.

Part-I

Q1 Only Short Answer Type Questions (Answer All-10)

(2 x 10)

- Outline the synthesis and uses of Thiopental sodium.
- Why adrenaline is used with procaine?
- Outline the synthesis and mechanism of action of 5-Fluorouracil
- Outline the synthesis and uses of Zidovudine.
- Give the structure, nomenclature and uses of chloramphenicol.
- Give the structure and nomenclature of alprazolam.
- Give the structure, nomenclature and uses of amantadine.
- Outline the synthesis and uses of nikethamide.
- Give the structure and nomenclature of imipramine.
- Give the structure and uses of Haloperidol.

Part-II

Q2 Short Answer Type Questions- (Answer Any Eight out of Twelve)

(6 x 8)

- Classify Local Anaesthetics chemically with suitable examples. Discuss the structure activity relationship of local anaesthetics.
- Classify anti-malarial agents with suitable examples. Outline the synthesis of Chloroquine.
- Classify antineoplastic agents with suitable examples. Outline the synthesis of Busulfan.
- Discuss briefly Immunosuppressives and immunostimulants.
- Discuss the different theories of mode of action of General anaesthetics.
- Discuss briefly antiparkinsonism agents with suitable examples.
- Define and classify opioid analgesics with suitable examples.
- Define and classify neuroleptics with suitable examples.
- Define and classify antiviral agents with suitable examples and add a note on Anti-HIV drugs.
- Outline the synthesis and uses of Thyroxine.
- Discuss briefly about the drugs and uses of Phosphodiesterase inhibitors.
- Discuss briefly about the drugs and uses of Angiotensin Converting Enzyme inhibitors.

Part-III

Q3 Only Long Answer Type Questions (Answer Any Two out of Four)

(16)

Define and classify antibiotics chemically with suitable examples. Discuss chemical features of β -lactam antibiotics. Describe the mechanism of action and structure activity relationship of penicillins. Outline the synthesis of Ampicillin and Methicillin.

Q4 Define and differentiate Sedative and Hypnotics. Classify them chemically with suitable examples. Outline the synthesis and uses of Phenobarbitone and Diazepam. Discuss the structure activity relationship of Barbiturates. (16)

Q5 What are the different types of epileptic seizures? Define and Classify chemically anticonvulsants with suitable examples. Outline the synthesis of Phenytoin and Ethosuximide. (16)

Q6 Define and Classify Oral hypoglycemic agents with suitable examples. Outline the synthesis of Chlorpropamide, Tolbutamide and Phenformin. Discuss briefly different types of Insulin preparations. (16)

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B.Pharm
15PH603

6th Semester Regular / Back Examination 2018-19

PHARMACOLOGY-II

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q.CODE : F380

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

The figures in the right hand margin indicate marks.

Part- I

Only Short Answer Type Questions (Answer All-10)

(2 x 10)

- State the Mechanism of action of Nifedipine.
- Tachycardia and Hypotension are possible adverse effects of nitroglycerine state T/F and justify.
- Why Combination of Magnesium hydroxide and aluminum hydroxide is preferred over their single use.
- Furosemide increases Ca^{2+} as well as Mg^{2+} excretion state T/F and Justify.
- Enumerate the diuretics inducing rapid diuresis and highly effective in Pulmonary edema.
- Justify the statements "Chronic alcoholism causes folate deficiency".
- Enumerate any two Prokinetic drugs.
- State the term compensated respiratory alkalosis.
- Enumerate any two 5-HT and DA antagonist.
- What do you mean by Raynaud's Phenomena?

Part- II

Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)

(6 x 8)

- Illustrate the Mechanism of action and uses of Potassium sparing diuretics.
- Explain the complications of high ceiling and thiazide diuretic therapy.
- Classify Antihypertensive drugs. Write the mechanism of action and adverse effects of CCBs
- Explain the role of β_2 agonists and leukotriene antagonists in treatment of Bronchial Asthma.
- Illustrate the Pharmacological action and toxicity of H_1 antihistaminics.
- Illustrate the Pathophysiological role and actions of Prostaglandins.
- Write the different metabolic functions of Vitamin B_{12} .
- Write the adverse effects and Drug interactions of Oral anticoagulants.
- Write the possible therapeutic use and adverse effects of Streptokinase and Urokinase.
- Explain the Mechanism Of Actions and uses of Ibuprofen and Ketorolac.
- Illustrate the Pharmacological actions and adverse effects of Preferential cox-2 inhibitors.
- What do you mean by Wolff-Parkinson-White Syndrome write the drug therapy for WPW Syndrome?

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Q3

Classify Antihypertensive drugs. Write details Mechanism of action, Adverse effects, and uses of β adrenergic Blockers and angiotensin(AT1 receptor) Blockers.

Q4

Classify Diuretics Write the Pharmacological action, Mechanism of action and therapeutic uses of Loop diuretics.

Q5

Classify Drugs used in Bronchial Asthma. Write the Mechanism of action, Pharmacological action, adverse effects and uses of Theophylline.

Q6

Differentiate between antifibrinolytic drugs and antiplatelet drugs. Write the mechanism action, adverse effects and uses of aspirin and Clopidogrel.

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B.Pharm
15PH604

6th Semester Regular/Back Examination 2018-19
PHARMACOGNOSY-IV

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q.CODE : F125

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

The figures in the right hand margin indicate marks.

Part- I

Only Short Answer Type Questions (Answer All-10)

(2 x 10)

- Write the biological source of Rauwolfia?
- What are the applications of paper chromatography?
- State the source and utilization of Quinine.
- Write the biological source and uses of Satavari.
- What are the chemical constituents and uses of Gokhru?
- State the preparation of Asava?
- Write the botanical source and uses of Tulsi.
- Name few marketed products of Taila.
- Write the chemical constituents and uses of Lobelia.
- What is the biological source of Spirulina?

Part- II

Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)

(6 x 8)

- Write a note on production and utilization of Podophylotoxin.
- Illustrate the method of preparation of Arista.
- Write the botanical source, uses and marketed formulations of Punarnava.
- Explain the biological source, chemical constituents and uses of Colchicum.
- Write the biological source, chemical test and uses of Ipecac.
- Illustrate the utilization and production of Tropane alkaloid.
- Write the botanical source, chemical constituents and marketed formulations of Brahmi.
- What are the principles of column chromatography?
- Explain the cultivation, collection and uses of Coca.
- Write the biological source, chemical constituents and chemical test of Kurchi.
- Enumerate the botanical name, chemical constituents and uses of Gymnema.
- Write the vernacular names, biological source and marketed formulations of Amla

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

- Explain the general methods of extraction and isolation of Alkaloids. Write the biological source, chemical constituents and uses of Nux-vomica.
- Describe the detail and systematic Pharmacognostic study of Cinchona. Write the biological source, chemical constituents and uses of Arjuna.
- Write the detail pharmacognosy of Belladonna. Describe the method of preparation of Bhasma.
- Discuss the biological source, life cycle and chemical constituents of Ergot. Write the applications of TLC in evaluation process of herbal drugs.

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Registration No :

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Total Number of Pages : 02

B.Pharm
15PH605

6th Semester Regular / Back Examination 2018-19

PHARM. BIOTECH

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q.CODE : F116

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

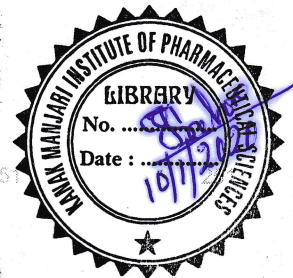
The figures in the right hand margin indicate marks.

Part- I

Q1 Only Short Answer Type Questions (Answer All-10)

(2 x 10)

- Define Haptens and give few examples.
- What is immunological tolerance?
- All immunogens are antigens but all antigens are not immunogens - Comment.
- Differentiate Cellular and Humoral immunity.
- What are plasmids and its role in gene cloning?
- What are Mutagens? Write some examples.
- What is HAT media and its use?
- What is the role of Baffles in a fermenter design?
- Write the advantages of microbial biotransformation?
- What are the uses of amylases?



Part- II

2 Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)

(6 x 8)

- What are immunoglobulins? Give an illustration on different isotypes of immunoglobulins with their specific characteristics.
- Classify Immunity. Give a note on Active and passive immunization with examples.
- Define Hypersensitivity. Discuss different types of Hypersensitivity reactions.
- Write about Components and steps involved in protein synthesis and add note on inhibition of protein synthesis.
- Give a Brief account of objectives and process of protein engineering with examples.
- Explain the term 'Recombination'. Write briefly the steps involved in Gene cloning and its applications.
- What are Immuno blotting techniques? List different types and write in detail about Southern blotting.
- Write note on Microbial biotransformation and applications
- Write a note of principle and types of ELISA with their respective advantages.
- Discuss in detail about production and isolation of Vitamin B12 with reference to fermentation technology.
- What are Biosensors? Write about its components, working principle and application in pharmaceutical industry.
- Write about the source, production and uses of Pencillinase.

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Total Number of Pages : 01

B.Pharm
15PH606

6th Semester Regular / Back Examination 2018-19
PHARMACEUTICAL JURISPRUDENCE

BRANCH : B.Pharma

Max Marks : 100

Time : 3 Hours

Q.CODE : F518

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

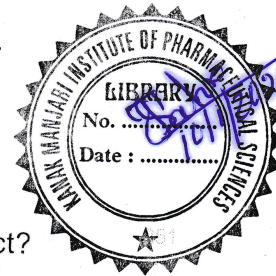
The figures in the right hand margin indicate marks.

Part- I

Only Short Answer Type Questions (Answer All-10)

- Write the objectives of Pharmacy Act, 1948.
- Give the legal definition of patent and proprietary medicines (allopathic).
- What is Loan license for manufacture of new drugs?
- Write the functions of Drug Consultative Committee.
- Enumerate the term "Drugs" and "Magic remedies".
- Define schedule "H" and schedule "X".
- What is the role of De-addiction centre?
- What do you mean by manufacturing outside bond under Excise Duty Act?
- State the definition of bulk drug.
- Define misbranded drug?

(2 x 10)



Part- II

Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)

(6 x 8)

- Describe the various aspects and provisions for Termination of Pregnancies according to Medical Termination of Pregnancy Act, 1975.
- Write the formula for calculation of Retail price of a drug formulation.
- What are the differences between bonded and non bonded laboratory?
- Describe the operation controlled by Central govt. and State govt. under Narcotic Psychotropic Substances Act and Rules, 1985.
- Illustrate classes of advertisements which are prohibited according to Drugs and Magic Remedies (Objectionable Advertisement) Act and Rules.
- Write the constitution and functions of DTAB.
- Describe the important points on experimentation on animals.
- Write in details about First Register.
- Write the qualification and duties of Government Analyst.
- Explain the offence and panalties of Narcotic Psychotropic Substances Act and Rules.
- What are the various functions of PCI?
- Describe the functions of health survey and development committee.

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Describe the qualification, duties and procedures of Drug Inspector as per Drugs and Cosmetics Act. (16)

Explain the conditions required for obtaining the license for manufacture of Biological and other special products specified in schedule C & C1. (16)

What is Code of Pharmaceutical Ethics? Discuss in details about Code of Pharmaceutical Ethics with special reference to Pharmacist in relation to his Job and Pharmacist in relation to Medical Profession. (16)

Write the constitution and functions of State Pharmacy Council and Joint State Pharmacy Council according to Pharmacy Act, 1948. (16)

Registration No :

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Total Number of Pages : 02

B.Pharm
15PH601

6th Semester Regular Examination 2017-18
PHARMACEUTICS – III (PHARM. TECH. - II)

BRANCH : B.Pharma

Time : 3 Hours

Max Marks : 100

Q.CODE : C132

Answer Part-A which is compulsory and any four from Part-B.
The figures in the right hand margin indicate marks.

Part – A (Answer all the questions)

Q1. Answer the following questions: *multiple type or dash fill up type* : (2 x 10)

- a) HEPA filters are capable of removing particles of _____ or greater with an efficiency of _____%.
- b) Pyrogen is _____. Mention which test is performed to selected the proper animals for the main test for pyrogen testing.
- c) _____ & _____ are used as antioxidant in ophthalmic products.
- d) Ophthalmic products must be _____ & pH should be _____.
- e) The basic components of aerosol are _____ & _____.
- f) The solution system of aerosol is called as _____ and water based system is called as _____.
- g) The active ingredient integrated within the matrix of the shell material is called as _____. The method of choice for the preparation of protein and polysaccharide micro-capsules is _____.
- h) Mention two water soluble resins used in microencapsulation.
- i) SVP is _____ & LVP is _____.
- j) Type I glass is called as _____ and Type II glass is called as _____.

Q2. Answer the following questions: *Short answer type* : (2 x 10)

- a) Name four routes of administration parenterally.
- b) Name the therapeutic category of drugs used in ophthalmic preparations.
- c) Give the differences between spray drying and spray congealing methods.
- d) Name four non aqueous vehicles for parenteral products.
- e) Name any four pharmaceuticals applications of microencapsulation.
- f) What is propellant? Give two examples of compressed gas propellant.
- g) What is tamper proof packaging? Name any two tests conducted for primary packaging.
- h) What is the role of actuator in aerosol?
- i) Water attack test is used only with type I glass. True or false justify?
- j) What is clean room class 100?



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Registration No :

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Total Number of Pages : 02

B.Pharm
15PH602

6th Semester Regular Examination 2017-18

MEDICINAL CHEMISTRY - II

BRANCH : B.Pharma

Time : 3 Hours

Max Marks : 100

Q.CODE : C196

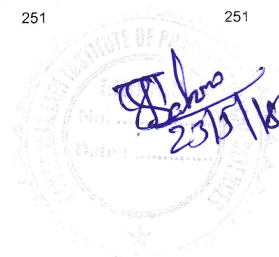
Answer Section 'A' which is compulsory and any Four from Section 'B'.
The figures in the right hand margin indicate marks.

SECTION-A

Q1 Answer the following Questions : (2 x 10)

- a) Mechanism of action of Zidovudine is:
- a) Uncoating inhibitor c) Adsorption inhibitor
b) Reverse transcriptase inhibitor d) Protease inhibitor
- b) Anaesthesia of mucous membranes is called:
- a) Infiltration anaesthesia c) Field block anaesthesia
b) Nerve block anaesthesia d) Topical anaesthesia
- c) Which one of the following belongs to long-acting barbiturate:
- a) Phenobarbital c) Thiopental
b) Pentobarbital d) Hexabutal
- d) Glibenclamide belongs to the class of:
- a) Sulphonyl uraes c) Thiazolidinediones
b) Benzoic acid derivatives d) Biguanides
- e) Xylocaine is:
- a) Ethyl-p-aminobenzoate
b) 2-(Diethylamino)ethyl-P-aminobenzoate
c) 2-(Diethylamino)-N-(2,6-dimethylphenyl)acetamide
d) 4-Chloroacetophenone
- f) Antidote used in Insulin toxicity is :
- a) Glucagon c) Glycogen
b) Phenformin d) Repaglinide
- g) The major route of elimination of the volatile general anaesthetics is via :
- a) Kidney c) Skin
b) Lungs d) Liver
- h) The stage of general anaesthesia in which the patient may move about and have a low tone of voice is:
- a) Stage-I c) Stage-II
b) Stage-III d) Stage-IV
- i) Which one of the following statement is TRUE on antineoplastic:
- a) selective toxicity to cancer cells
b) kill cells by zero-order kinetics
c) easy access to cancer cells of any region
d) easily develop resistance

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- j) Why does only female anopheles mosquito cause malaria?
 - a) because female is evolutionarily designed to be cruel
 - b) because female need blood from vertebral host to nourish eggs
 - c) males find it difficult to suck blood
 - d) blood is the only diet for female mosquitoes

Q.2 Answer the following Questions :

(2 x 10)

- a) Name the different types of CNS Stimulants with suitable examples.
- b) Differentiate between Opioid and non opioid analgesic with examples.
- c) Discuss the role of Amantidine in parkinsonism disease
- d) Write the structure and chemical name of Thiotepa
- e) Give the name and structure of 5,5-Diethyl barbituric acid.
- f) Differentiate between Barbiturates and Benzodiazepines
- g) Define Biochemical theory of General anaesthetics.
- h) Write synthesis and uses of Thiopental sodium.
- i) Write synthesis and uses of Methadone.
- j) Give the mechanism of action of Neuroleptics.

SECTION-B

- Q3** a) Classify oral hypoglycaemic agents with examples. Give the synthesis, uses and mode of action of Chlorpropamide. (10)
- b) Write short notes on Insulin and Insulin preparations. (5)

- Q4** a) Define and Classify antibiotics with examples. Discuss the SAR and Stereochemistry of Penicillin. (10)
- b) Write synthesis, mechanism of action and uses of Chloramphenicol. (5)

- Q5** a) Classify the Antimalarials based on their chemical nucleus. Give synthesis, chemical name and uses of Pyrimethamine. (10)
- b) Write the synthetic route mechanism of action and uses of Chloroquine. (5)

- Q6** a) What are the different stages of viral Infection? Classify anti-HIV agents with example. write the synthesis of Zidovudin. (10)
- b) Write Pharmaceutical significance of ACE Inhibitors. (5)

- Q7** a) Classify anticonvulsants with examples. Outline the synthetic route of Primidone and Phenytoin. (10)
- b) Write note on immunosuppressive agents. (5)

- Q8** a) Define and classify sedatives and hypnotics. Write the synthesis of Cyclobarbitol and Diazepam. (10)
- b) Classify anxiolytics and give synthesis and therapeutic uses of Haloperidol. (5)

- Q9** a) Outline the synthesis and uses of following drugs (10)
 - i. Procainamide
 - ii. Chlorambucil
 - iii. Levodopa
 - iv. Dibucaine
- (b) Write note on Antithyroid drugs. (5)

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Total Number of Pages : 03

B.Pharm.
15PH603

6th Semester Regular Examination 2017-18

PHARMACOLOGY - II

BRANCH : B.Pharma

Time : 3 Hours

Max Marks : 100

Q.CODE : C319

Answer Part-A which is compulsory and any four from the Part-B.
The figures in the right hand margin indicate marks.

Part-A

(2 x 10)

Choose the correct answer :

- a) Which of the following is an ACE inhibitor?
- Saralasin
 - Diltiazem
 - Captopril
 - Spirinolactone
- b) The mechanism of action of digitalis is-
- Increase in heart rate with increase in oxygen consumption
 - Increase in heart rate without increase in oxygen consumption
 - Decrease in heart rate with increase in oxygen consumption
 - Decrease in heart rate with decrease in oxygen consumption
- c) Phase 0 in action potential in cardiac muscle is due to-
- opening of Na⁺ channels
 - closing of Na⁺ channels
 - opening of Ca²⁺ channels
 - closure of calcium channels
- d) Verapamil acts by-
- Blocking membrane depolarization
 - Calcium channel blockers
 - Membrane stabilizing
 - Blockers membrane repolarisation
- e) All drugs are used in Asthma except
- Salbutamol
 - Sodium cromoglycate
 - Corticosteroids
 - Organophosphates
- f) Loop diuretics act by-
- Inhibition of Na⁺-Cl⁻ symport
 - Inhibition of Na⁺-K⁺-2Cl⁻ cotransport
 - Inhibition of Na⁺-K⁺ ATPase
 - Inhibition of Na⁺ channel
- g) Nitroglycerine causes all except
- Hypotension and bradycardia
 - Methemoglobinemia
 - Hypotension and tachycardia
 - Vasodilatation

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23/07/18

h) Which of the following action is not caused by H_1 receptor

- i. Vasoconstriction
- ii. Gastric acid secretion
- iii. Increase Permeability
- iv. Bronchoconstriction

i) Mechanism of action of theophylline

- i. Mast cell stabilization
- ii. Phosphodiesterase inhibition
- iii. Leukotriene antagonist
- iv. β_2 sympathomimetic

j) Name the drug use for treatment of acute angina

- i. Nitroglycerine
- ii. Ramipril
- iii. Verapamil
- iv. Propranolol

Q.2 Write the mechanism of action of following drugs :

- a) Quinidine
- b) Nifedipine
- c) Nitroglycerine
- d) Atorvastatin
- e) Hydrochlorothiazide
- f) Salbutamol
- g) Cetirizine
- h) Spironolactone
- i) Diclofenac
- j) Ramipril

Part-B

Q.3 a) What is Angina pectoris? Classify the antianginal drugs.
b) Write the pharmacological actions, mechanism of action and therapeutic uses of Digitalis.

Q.4 a) Define and classify Hypertension.
b) Classify antihypertensive. Write the pharmacology of ACE inhibitors.

Q.5 a) Define and classify diuretics with suitable examples. Write the Pharmacology of Loop diuretics.
b) Write briefly on Antidiuretics

Q.6 a) Classify the drugs used in bronchial asthma. Write short notes on Bronchodilator.
b) **Write short notes on :**
i. Respiratory stimulant
ii. Expectorant

Q.7 a) Discuss in details about the synthesis, storage and metabolism of histamine.
b) Write different types of histamine receptors and their functions. Write pharmacology of H_1 antagonists.

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Q.8 a) Define and classify anticoagulants. Discuss the mechanism and side effects of warfarin. **(5+5)**

b) Write brief notes on fibrinolytics and haematinics. **(5)**

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Q.9 Write notes on Any THREE **(5 x 3)**

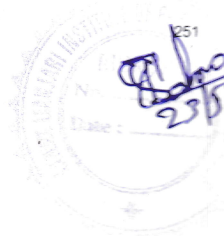
a) Prostaglandin

b) Angiotensin

c) 5-HT antagonist

d) NSAIDs

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B.Pharm.
15PH604

6th Semester Regular Examination 2017-18
PHARMACOGNOSY-IV
BRANCH : B.Pharma
Time : 3 Hours
Max Marks : 100
Q.CODE : C471

Answer Section 'A' which is compulsory and any Four from Section 'B'.
The figures in the right hand margin indicate marks.
Answer all parts of a question at a place.

Section 'A'

(2 x 10)

Q1.

Answer the correct option of the followings :

- a) Family of Tea is -----
i) Theaceae ii) Apocynaceae
iii) Leguminosae iv) Zygophyllaceae
- b) ----- gives stimulant & diuretic properties of Coca.
i) Theobromine ii) Caffeine
iii) Coumarin iv) Xanthene
- c) Shankhapushpi is used as -----
i) Sedative ii) Narcotic
iii) Purgative iv) Diuretic
- d) Family of Gymnema is -----
i) Acanthaceae ii) Asclepiadaceae
iii) Asteraceae iv) Araliaceae
- e) Guggul is an -----resin.
i) Oleo-gum ii) Acid
iii) Oleo iv) Alcohol
- f) Ipecac is ----- alkaloid.
i) Indole ii) Isoquinoline
iii) Tropane iv) Quinoline
- g) ----- is the Family of Bael.
i) Rutaceae ii) Rubiaceae
iii) Liliaceae iv) Solanaceae
- h) Amla is the rich source of -----
i) Vitamin A ii) Vitamin C
iii) Vitamin D iv) Vitamin K
- i) Synonyms of Catharanthus is -----
i) Sarpagandha ii) Periwinkle
iii) Henbane iv) Monkshood
- j) Ma-Huang is the common name of -----
i) Veratrum ii) Ephedra
iii) Kurchi iv) Colchicum

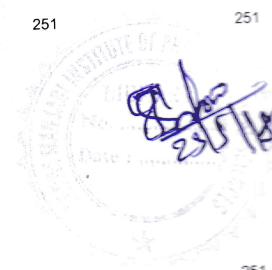
Q2.

Answer the following questions :

(2 x 10)

- a) Enumerate the Biological source of Rauwolfia?
b) Specify the important Chemical constituents present in Spirulina.
c) Mention the name of two marketed formulations of Neem.

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Total Number of Pages : 02

B.Pharm.
15PH605

6th Semester Regular Examination 2017-18
PHARM. BIOTECH
BRANCH : B.Pharma
Time : 3 Hours
Max Marks : 100
Q.CODE : C271

Answer Part-A which is compulsory and any four from Part-B.
The figures in the right hand margin indicate marks.

Part – A (Answer all the questions)

(2 x 10)

Q1. Define the followings :

- Write the definition of Gene expression.
- Define Microbial biotransformation.
- What is Immunological tolerance?
- Define Southern blotting.
- Define Clonal expansion.
- Write the definition of Immobilization.
- Define the term "Genetic Code".
- What do you mean by Genetic Recombination?
- Define Antigen?
- Write the definition of Immunity.

Q2. Answer the following questions : *Short answer type* :

(2 x 10)

- Explain "*Natural acquired passive immunity*".
- What is Antibody?
- Write the applications of Gene cloning.
- Write the name of first Immobilized enzyme.
- Write the principle of Immunology.
- What is Transcription in protein synthesis?
- Write the uses of streptokinase.
- Write about "*Artificially acquired active immunity*".
- What are the applications of Hybridoma Technology?
- Write the uses of Penicillinase enzyme.

Part – B (Answer any four questions)

- Q3. a) How Genetic code helps for Protein synthesis?
b) Write about PCR.

(10)
(5)

- Q4. a) Describe in details about the classification and applications of Biosensor.
b) Write the Properties and application of Amylases.

(10)
(5)

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23/5/18

Q5. a) Explain the different types of hypersensitivity reactions in details. (10)
b) Write the advantages of Microbial transformation. (5)

Q6. a) Describe the design and control of different parameters of a Fermenter. (10)
b) Write the difference between Humoral immunity and Cellular immunity. (5)

Q7. a) What are the different types of Immuno blotting techniques? Describe ELISA. (10)
b) Write short notes on Mutation with it's classification. (5)

Q8. a) Explain any two methods of Enzyme immobilization. (10)
b) Write the different applications of Enzyme immobilization. (5)

Q9. a) Explain the process involved in isolation of Penicillin. (10)
b) Write Preparation, standardization and storage of Vaccines. (5)

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Total Number of Pages : 02

B.Pharm.
15PH606

6th Semester Regular Examination 2017-18
PHARMACEUTICAL JURISPRUDENCE

BRANCH : B.Pharma

Time : 3 Hours

Max Marks : 100

Q.CODE : C406

Answer Part-A which is compulsory and any four from Part-B.
The figures in the right-hand margin indicate marks.

Part - A (Answer all the questions)

- Q1** Answer the following questions: Choose the correct answer : (2 x 10)
- a) The state Government may appoint desired number of _____ officers which is necessary to carry out the provisions of the _____ and Toilet Preparation Act and Rules. (251)
- i) Police, Spirit
ii) Excise, Medicinal
iii) Income tax, Alcohol
iv) Custom, Medicinal
- b) The Pharmacy Council of India is reconstituted in every _____ years. (251)
- i) Seven
ii) Six
iii) Five
iv) Four
- c) _____ and _____ licenses are issued for retail sale of drugs. (251)
- i) Restricted, Non-restricted
ii) Non-general, Restricted
iii) General, Non-general
iv) General, Restricted
- d) GMP for Ayurvedic, Siddha and Unani Medicines are included in which of the following schedule of Drug and Cosmetic Act. (251)
- i) Schedule Y
ii) Schedule W
iii) Schedule S
iv) Schedule T
- e) In the opinion of _____ RMP; the pregnancy can be terminated in a period of pregnancy that exceeds _____ weeks but does not exceeds _____ weeks. (251)
- i) Two, 12, 22
ii) Two, 10, 20
iii) Two, 12, 20
iv) Two, 10, 24
- f) The Poison Act, 1919 was Passed on _____. (251)
- i) 3rd September
ii) 5th October
iii) 13th November
iv) 23rd August
- g) Governments of India introduced Pharmacy Act in _____ and regulate the _____ and _____ of Pharmacy. (251)
- i) 1945, profession, practice
ii) 1940, non-professional, practice
iii) 1947, profession, non-practice
iv) 1945, profession, non-professional
- h) IAEC Under Act denote to _____. (251)
- i) Indian Atomic Energy Commission
ii) Institutional Animals Ethics Committee
iii) Inter-American Economic Council
iv) International Association of Elevator Consultants
- i) Requirement of factory premises for manufacture of medical device in Schedule _____ and under Rule _____. (251)
- i) Schedule M I, 139
ii) Schedule M III, 76
iii) Schedule M II, 86
iv) Schedule M IV, 76

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23/5/18

j) Pharmaceutical Enquiry Committee was constituted under chairmanship of

- i) Col. R. N. Chopra
- ii) Sir Joseph Bhore
- iii) Lt. Col. H. A. J. Gidney
- iv) Major General S. S. Bhatia

Q2 Answer the following questions :

(2 x 10)

- a) What are the objectives of Factories Act?
- b) Define first and subsequent Registrar of Pharmacy act.
- c) Write constitution and function of the Narcotic and Psychotropic Substance Consultative Committee.
- d) Define 'Advertisement' and 'Magic remedy'.
- e) Give important features of Bonded Laboratory.
- f) What criteria shall have needed for performing experiment on animals?
- g) Define 'Proprietary medicine' and 'Misbranded drug'.
- h) Give classification of patents.
- i) What is Schedule C & C₁?
- j) Give a formula for calculating retail price of drug.

Part - B (Answer any four questions)

- Q3** a) Describe the constitution and important functions of Pharmacy Council of India. (10)
- b) Give an outline on important specification for obtaining patent. (5)
- Q4** a) Give an overview on Code of Pharmaceutical Ethics. (10)
- b) Explain constitution and function of Drugs Technical Advisory Board. (5)
- Q5** a) How the Medical Termination of Pregnancy Act and Rules are regulating unwanted or medical undesirable pregnancy in India. (10)
- b) Explain Factory act relating to 'Health and safety'. (5)
- Q6** a) Discuss on prohibition, control and regulation of Narcotic and Psychotropic substances under the Act. (10)
- b) Write duties of Drug Inspector. (5)
- Q7** a) What are the important features of the Medicinal and Toilet Preparation Act and Rules? (10)
- b) Write short note on 'The Drugs Price Control Order'. (5)
- Q8** a) How unethical practice on animals can be controlled under the Prevention of Cruelty of animal act? (10)
- b) Give details on possession and sale of poisons under the Act? (5)
- Q9** a) Write on Prohibition, Exemptions of advertisement and penalties under the Drugs and Magic Remedies Act. (10)
- b) Give a detail study on The Drugs Consultative Committee. (5)

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B.Pharm.

PH.6.7

6th Semester Back Examination 2017-18

PHARMACOGNOSY - IV

BRANCH : B.Pharma

Time : 3 Hours

Max Marks : 70

Q.CODE : C472

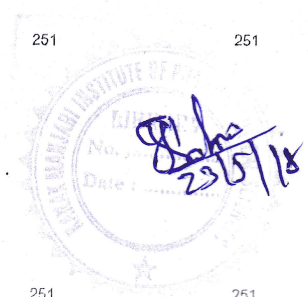
Answer Question No.1 which is compulsory and any five from the rest.

The figures in the right hand margin indicate marks.

Answer all parts of a question at a place.

- Q1. Answer the following questions : (2 x 10)
- Write the biological source of Lobelia.
 - Give an account on Asava.
 - Mention the biological source of Satavari.
 - Name two marketed products of Bhasma.
 - What are the Chemical constituents and uses of Neem
 - Mention the biological source of Rauwolfia.
 - Which important chemicals are present in Tulsi.
 - What is the biological source of Spirulina?
 - Highlight the source and utilization of Quinine.
 - Specify the important chemical constituents of Gokhru.
- Q2. Explain the detail Pharmacognosy of Belladonna. (10)
- Q3. Write the general methods of Extraction and Isolation of Alkaloids. (5+5)
- Q4. Describe in details about the production and utilization of Podophylotoxin and Diosgenin. (5+5)
- Q5. Write down the method of preparation of Ayurvedic dosage forms:
- Arista (5)
 - Taila (5)
- Q6. Give the details of Botanical source, Chemical constituents, Uses and marketed formulations of:
- Punarnava (5)
 - Gymnema (5)
- Q7. What are the Biological source, Chemical constituents, Chemical test and Uses of following drugs:
- Colchicum (5)
 - Ipecac (5)
- Q8. Explain the detail Pharmacognosy of following drugs:
- Ergot (5)
 - Brahmi (5)

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B.Pharm.
PH.6.9

6th Semester Back Examination 2017-18

PHARMACOLOGY - II

BRANCH : B.Pharma

Time : 3 Hours

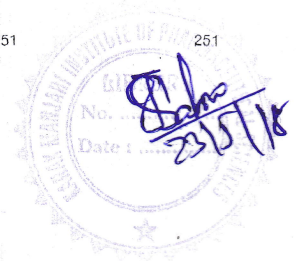
Max Marks : 70

Q.CODE : C320

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

- Q1. Answer the following questions : (2 x 10)
- Define coagulants. Write any two coagulants. (5)
 - Write the difference between Quantal and Graded Bioassay. (5)
 - Write one example of heparin antagonist and its use. (5)
 - What are fibrinolytics, write one example. (5)
 - Name any four Class III anti-arrhythmic drugs. (5)
 - What is PSVT? Name any two drugs used for the treatment of PSVT. (5)
 - What are antitussive drugs? Mention any two antitussive agents. (5)
 - Write two examples of AT1 blockers and their uses. (5)
 - Name any two anti-platelet drugs and their uses. (5)
 - Write any two respiratory stimulants and their uses. (5)
- Q2. a) Classify antiasthmatic drugs with suitable examples. Write down about the mechanism of theophylline for its anti-asthmatic activity. (5)
- b) Write the mechanism, adverse effect and uses of mast cell stabilizer. (5)
- Q3. a) Classify diuretics with examples. Write the mechanism of action of spironolactone. (5)
- b) Write about the mechanism and adverse effects of thiazide diuretics. (5)
- Q4. a) Briefly discuss about the pharmacology of ACE inhibitors. (5)
- b) Describe about the mechanism of action and uses of calcium channel blockers. (5)
- Q5. a) Write the mechanism, adverse effect & uses of digoxin. (5)
- b) Briefly discuss about the pharmacology of quinidine. (5)
- Q6. a) Define anticoagulants. Write the mechanism and adverse effect of warfarin. (5)
- b) Give a brief account on haematinics. (5)
- Q7. Classify antianginal drugs. Write the mechanism, adverse effects & uses of Glycerol trinitrate. (10)
- Q8. Write note on any TWO : (5 x 2)
- Bioassay of Insulin.
 - 3 point bioassay method.
 - 5-HT Antagonist
 - Plasma volume expanders

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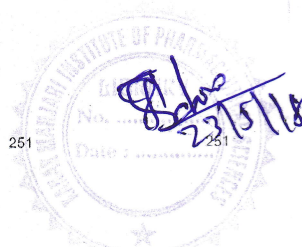
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B.Pharm
PH.6.11

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6th Semester Back Examination 2017-18
PHARMACEUTICAL JURISPRUDENCE AND ETHICS
BRANCH : B.Pharma
Time : 3 Hours
*** Max Marks : 70**
Q. CODE : C197

251 251 251 251 251 251
Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right-hand margin indicate marks.

- Q1 Answer the following questions : (2 x 10)**
- a) Define the terms 'Patent' and 'Patentee'.
 - b) What facilities are available in a factory under 'The Factories Act'?
 - c) Write Schedule – I & II under The Drugs Price Control Order.
 - d) Who are elected members of Pharmacy Council of India (PCI)?
 - e) Name Chairperson and Assistant secretary of Drug Enquiry Committee.
 - f) What ethics a pharmacist should follow in relation to handling of drugs?
 - g) What is Schedule P and X?
 - h) Define the term 'Adulterated Drugs'?
 - i) Which month and year The Medicinal and Toilet Preparation Act was effectively implemented in India?
 - j) What are the duties of Narcotic commissioner?
- Q2**
- a) Explain Education Regulation-1991 according to Pharmacy Act? (5)
 - b) Describe the constitution of State Pharmacy Councils. (5)
- Q3**
- a) What experience or training shall obtain by Registered Medical Practitioner (RMP) under The Medical Termination of Pregnancy Act? (5)
 - b) Give in details on Pharmacist in relation to his profession under Code of Pharmaceutical ethics. (5)
- Q4** Discuss on whole sale and retail sale of drugs. Write specimen labeling of Pentobarbitone Sodium Injection U.S.P. (10)
- Q5**
- a) Describe the qualification and duties of Government analysts. (5)
 - b) What type and condition of advertisements are exempted under The Drugs and Magic remedies Act? (5)
- Q6**
- a) Describe Import and Export of Narcotic Drugs under the Act. (5)
 - b) Write the constitution and function of Institutional Animal Ethics Committee (IAEC). (5)
- Q7**
- a) What are the procedure to obtaining patent with reference to provisional and complete specification of Patent? (5)
 - b) Describe the provisions of the Factory Act relating to 'Cleanliness and safety officer'. (5)
- Q8 Write short answer on any TWO : (5 x 2)**
- a) Poisons Act 1919.
 - b) Import and manufacture of Cosmetics under Drug & Cosmetics Act.
 - c) How to calculate the retail price of a formulation under Drugs and Price control order?
 - d) Registration of pharmacist under Pharmacy Act.



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