

Registration no:

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Total Number of Pages: 2

B.PHARM
PH 6.1

6th Semester Regular / Back Examination 2015-16

PHARMACEUTICS-V
(PHARMACEUTICAL TECHNOLOGY- II)

Branch: BPharm
Time: 3 Hours

Max marks: 70
Q.Code: W102

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) What is the role of actuator in aerosol?
- b) Water for injection (WFI) is sterile and pyrogen free. True or false, Justify.
- c) What is clean room class 100?
- d) Bacteriostatic water for injection cannot be used in the preparation of LVP. True or false, Justify.
- e) Water attack test is used only with type I glass. True or false. Justify.
- f) Ophthalmic formulations need not be sterile. True or false, justify.
- g) Name the evaluation tests for microcapsules.
- h) Write about flash point test for aerosols.
- i) Microencapsulation is not possible for droplets of liquids and dispersions. True or false, Justify.
- j) What is cold sterilization?

Q2

- a) Briefly discuss stability aspects of packaging **(5)**
- b) Discuss critically about aqueous vehicles used in formulation of parenterals. **(5)**

Q3

- a) Write in detail about propellants used in formulation of aerosols. **(5)**
- b) Discuss in about the formulation of pharmaceutical aerosol solution systems. **(5)**

Q4 Define co-acervation phase separation technique. Discuss in detail about any two methods of coacervation phase separation with phase diagram and suitable examples of drug and polymer. **(10)**

Q5

a) Discuss in detail about microencapsulation by air suspension technique. **(5)**

b) Write in detail about evaluation test for parenterals. **(5)**

Q6 Draw the flow chart for flow of materials in the production department of parenterals. Discuss in detail about facilities required for manufacturing of parenteral dosage forms. **(10)**

Q7 Write briefly on the following **(5×2)**

a) Contact lenses

b) Routes of administration of parenterals.

Q8 Describe briefly on the following **(2.5×4)**

a) Treated Soda lime glass

b) Drug plastic considerations

c) Dosage with metered valve

d) Tamper resistant packaging

Registration no:

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Total Number of Pages: 2

B.PHARM

PH.6.3

6th Semester Regular / Back Examination 2015-16

PHARMACEUTICAL CHEMISTRY-VI

(MEDICINAL CHEMISTRY-II)

Branch: Pharmacy

Time: 3 Hours

Max Marks: 70

Q.CODE: W188

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:

(2 x 10)

- a) Outline the uses and mechanism of action of clonidine.
- b) Outline the synthesis of an antihypertensive drug having quinazolinamine nucleus.
- c) Give the structure, nomenclature and uses of amantadine.
- d) Discuss steroidal anti-inflammatory agents with suitable examples.
- e) Outline the synthesis and uses of diethyl stilbesterol.
- f) Outline the synthesis and uses of thiopental sodium.
- g) Discuss the structural features and uses of morphine.
- h) Discuss the role of dopamine and acetylcholine in parkinson's disease.
- i) Name the different types of CNS stimulants with suitable examples.
- j) What is hypertension? Give the structure of an antihypertensive agent with 1,4-dihydropyridine nucleus.

Q2

- a) Discuss in detail the classification and structure activity relationship of local anaesthetics with suitable examples.

(5+5)

- b) Outline the synthesis of benzocaine and lignocaine

Q3

- a) Discuss the classification of hypnotics and sedatives on the basis of their chemical structures with suitable examples.
- b) Describe the synthesis and uses of diazepam and glutethimide.

(5+5)

- 257 257 257 257 257 257 257
- Q4** a) Discuss the classification diuretics on the basis of their chemical nucleus with suitable examples and briefly describe the structure activity relationship of thiazide diuretics. (5+5)
- b) Outline the synthesis and uses of acetazolamide and chlorthiazide.
- Q5** What are the different types of psychopharmacological agents? Briefly classify them with suitable examples and outline the uses of chlorpromazine and imipramine. (1+2+7)
- Q6** What are anticonvulsants? Classify them with suitable examples. Outline the synthesis of primidone and carbamazepine. (1+2+7)
- 257 257 257 257 257 257 257
- Q7** a) Discuss the nomenclature and stereochemistry of steroids with suitable examples. (5+5)
- b) Outline the synthesis, mechanism of action and uses of testosterone.
- Q8** Outline the synthesis and uses of the followings. (2.5 X 4)
- a) Levodopa
- b) Procainamide
- c) Nikethamide
- d) Pethidine
- 257 257 257 257 257 257 257
- 257 257 257 257 257 257 257
- 257 257 257 257 257 257 257

Registration no:

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Total Number of Pages:01

B.PHARM

PH.6.5

6th Semester Regular / Back Examination 2015-16

PHYTOCHEMISTRY

Branch: Pharmacy

Time: 3 Hours

Max Marks: 70

Q.CODE: W318

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:

(2 x 10)

- What is super critical fluid and how it is helpful in the extraction?
- What is Ziesel's method? Mention its use.
- What is TLC? Name some visualising agent used in TLC.
- Write down the name and chemical structure of aglycone part of Ouabain.
- Write two chemical tests for identification of alkaloids.
- What happens when penicillin is subjected to acid hydrolysis?
- Explain isoprene rule.
- Differentiate between Cardenolides and Bufadenolides with examples.
- Write down the source and deficiency disease caused by Folic acid.
- What is Zerewitnoff's method? Mention its use.

Q2

- Write the general methods of extraction of phyto constituents from the crude drug.
- Write the application of IR and Mass spectroscopy in structural elucidation.

(5+5)

Q3

Explain the pharmacological action of cardiac glycosides? Write the chemistry of Digitoxin and Scillaren A

(2+4+4)

Q4

Write the classification and chemical identification tests of flavonoids. Discuss the chemistry of Quercetin.

(2+3+5)

Q5

What are terpenoids? Classify them and elucidate the structure of Citral.

(1+3+6)

Q6

Define Alkaloids. Elucidate the structure of Ephedrine

(2+8)

Q7

Write notes on:

(5+5)

- Stereochemistry of menthol
- Chemistry of Vitamin C

Q8

What are antibiotics? Explain the reaction involved in the structural elucidation of Streptomycin.

(2+8)

Registration No:

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Total number of printed pages- 2

B.Pharm
PH.6.7

6th Semester Regular / Back Examination 2015-16

PHARMACOGNOSY – IV

Branch: Pharmacy

Full Marks-70

Time: 3 Hours

Q.CODE: W405

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

1. Answer the following questions: (2 x 10)

- Write the biological source of Ephedra.
- What do you mean by Arista?
- Write the biological source of Arjuna.
- Name two market products of Tailas.
- Write the Chemical constituents and uses of Bael.
- Write the biological source of Belladonna.
- Write the chemical constituents of Punarnava.
- What is Stas-Otto process?
- Write the source and utilization of Podophylotoxin.
- Write the chemical constituents of Lobelia.

2. Write the general methods of extraction and isolation of alkaloids. (5+5)

3. Write the detail pharmacognosy of Cinchona. (10)

4. Write a note on production and utilization of Quinine and Diosgenin. (5+5)

5. Write the method of preparation of Ayurvedic dosage forms: (5+5)

- Asava
- Bhasmas

6. Write the Botanical source, Chemical constituents, Uses and marketed formulations of:

(5+5)

a) Tulsi

b) Amla

7. Write the Biological source, Chemical constituents, Chemical test and Uses of: **(5+5)**

a) Tea

b) Rauwolfia

8. Write notes on: **(5 +5)**

a) Drugs of Steroidal alkaloids

b) Guggul

Registration no:

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Total Number of Pages: 01

B.PHARM
PH.6.9

6th Semester Regular / Back Examination 2015-16

PHARMACOLOGY - II

BRANCH: Pharmacy

Time: 3 Hours

Max Marks: 70

Q.CODE: W457

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)**

- Write any four therapeutic uses of vit-B-12
- Define classical angina enumerate any two anti-angina drugs.
- Write two major side effects of Quinidine.
- Define central sympatholytics with examples.
- Define re-entrant arrhythmia & write their causes.
- Give any two examples of bronchodilators & write their MOA.
- Define centrally acting antitussives give two examples.
- Why Beta blockers not recommended in bronchial asthma.
- Write any four therapeutic uses of Spironolactone
- Write the mechanism of action of Methylxanthine

Q2

- Classify drugs used in treatment of Hypertension with examples. **(5)**
- Write the mechanism, side effects and uses of Telmisartan. **(5)**

Q3

- Define COPD. Classify drugs used for Bronchial Asthma **(5)**
- Write the Mechanism, Side effects and uses of mast cell stabilizers **(5)**

Q4 Define bioassay. Write the different types of bioassay with suitable examples. Write the principles and procedure for bioassay of Insulin. **(10)**

Q5

- Classify anti-arrhythmic Drugs. Write the Mechanism of action of Amiodarone. **(5)**

- Write the Adverse effects and uses of Amiodarone. **(5)**

Q6

- Write shortly about synthesis, storage and release of 5-HT **(5)**
- Write the detail pharmacology of Ergotamine. **(5)**

Q7

- Define and classify diuretics. **(5)**
- Write the mechanism, side effects and therapeutic uses of Furosemide. **(5)**

Q8 Write short notes on any two: **(5 x 2)**

- Calcium Channel Blockers
- Vitamin K
- Potassium sparing Diuretics
- Prostaglandins

Registration no:

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Total Number of Pages: 02

B.Pharm
PH.6.11

6th Semester Regular / Back Examination 2015-16
PHARMACEUTICAL JURISPRUDENCE AND ETHICS

BRANCH: Pharmacy

Time: 3 Hours

Max Marks: 70

Q.CODE: W138

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) Write the objectives of Pharmacy Act, 1948.
- b) Define schedule "G" and schedule "M".
- c) Where Central Drug Research Institute is located.
- d) What is the role of De-addiction Centre?
- e) Define the term "Bulk Drug".
- f) Mention the year of constitution for Patent Act and Factory Act.
- g) What is Loan licence for manufacture of new drugs?
- h) Write the functions of Government Analyst.
- i) Differentiate bonded and non-bonded laboratories?
- j) What is Schedule C & C1?

Q2 Write the constitution and functions of Pharmacy Council of India according to Pharmacy Act, 1948. **(5+5)**

Q3 Discuss in details about Code of Pharmaceutical Ethics with special reference to Pharmacist in relation to his Job and Pharmacist in relation to his Trade. **(5+5)**

Q4 Describe the qualification, duties and procedures of Drug Inspector as per Drugs and Cosmetics Act. **(10)**

Q5 a) Write the constitution and functions of DTAB **(5)**

b) What are the prohibited advertisement mentioned under the Drugs and Magic Remedies (Objectionable Advertisements) Act 1954? **(5)**

Q6 Describe the various aspects and provisions for Termination of Pregnancies according to Medical Termination of Pregnancy Act, 1975. **(10)**

Q7 a) Describe the operation controlled by Central govt. and State govt. under Narcotic Psychotropic Substances Act and Rules, 1985. **(5)**

b) Describe the important points on experimentation on animals. **(5)**

Q8 Write notes on any **two**: **(5 x 2)**

a) Drug Consultative Committee

b) Write the formula for calculation of Retail price of drug formulation.

c) Poisons Act, 1919

d) Conditions for obtaining the licence of bonded laboratory.