FINAL YEAR B.PHARM. SEMESTER-VII (2011 COURSE) :
SUMMER - 2018
SUBJECT: BIOPHARMACEUTICS & PHARMACOKINETICS

Day: **Wednesday** Time: **02.00 PM TO 05.00 PM**
Date: **02/05/2018** Max. Marks: 80

S-2018-3979

N.B.:

1) **Q. No. 1** and **Q. No. 5** are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from each section.
2) Figures to the right indicate **FULL** marks.
3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

Q.1 Answer any **FIVE** of the following: **(10)**

a) Thiopental has fast onset of action followed by rapid termination of action. Explain.

b) Define volume of distribution and clearance.

c) Differentiate between active transport and facilitated diffusion.

d) Explain with example the significance of drug- drug interaction in case of protein –drug binding.

e) Explain the influence of pH of microenvironment on the dissolution of drug.

f) Explain dose adjustment in renal failure.

Q.2 **a)** Highlight the role of polymorphism with respect to drug absorption. **(08)**

b) Give an account of influence of manufacturing variables in the tablet dosage form with respect to drug absorption. **(07)**

Q.3 **a)** Explain effect of urine pH and drug pKa on renal clearance. **(08)**

b) Give an account of kinetics of protein –drug binding. **(07)**

Q.4 Write short notes on any **TWO** of the following: **(15)**

a) Physiological barriers to drug distribution

b) Chemical factors affecting biotransformation

c) Carrier mediated drug transport

P. T. O.

SECTION-II

Q.5 Answer any **FIVE** of the following: **(10)**

a) Explain the trapezoidal rule to determine AUC.

b) Define MRT and give its equation.

c) Give the objectives of bioavailability studies.

d) Define clinical pharmacokinetics and pharmacodynamics.

e) What is cross over design?

f) Explain physiological model.

Q.6 **a)** Compute the mathematical expression to obtain k_E following I.V. infusion assuming one compartment open model. **(08)**

b) Explain the pharmacokinetic approach to determine bioavailability. **(07)**

Q.7 **a)** Give an account of different approaches to improve bioavailability of drug. **(08)**

b) Explain the different study design for bioequivalence testing. **(07)**

Q.8 Write short notes on any **TWO** of the following: **(15)**

a) Method of Residuals

b) Compartmental modelling

c) Non compartmental pharmacokinetics

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FINAL YEAR B.PHARM. SEMESTER-VII (2011 COURSE) :
SUMMER - 2018
SUBJECT: CLINICAL PHARMACY

Day : **Friday** Time: **02.00 PM TO 05.00 PM**
Date : **04/05/2018** **S-2018-3980** Max. Marks: 80

N.B.:

1) **Q.No.1** and **Q. No.5** are **COMPULSORY**. Out of the remaining questions attempt **ANY TWO** questions from each section.
2) Answers to both the sections should be written in **SEPARATE** answer books.
3) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 Answer **ANY FIVE** of the following: **[10]**

a) What are components of Drug Therapy Monitoring?
b) Expand following abbreviations PCV and CK.
c) Give the significance of Serum Creatinine.
d) Define hypokalemia.
e) Define Minimum Inhibitory Concentration (MIC).
f) Give significance of Thyroid Stimulating Hormone (TSH).
g) Define drug information service.

Q.2 **a)** Discuss systematic approach for solving drug information query. **[08]**
b) Classify different adverse drug reactions. **[07]**

Q.3 **a)** Discuss thyroid function tests. **[08]**
b) Explain Drug Utilization Evaluation Cycle. **[07]**

Q.4 Write note on **ANY THREE** of the following: **[15]**

a) Ward round participation
b) Medication history
c) Hyponatremia
d) Quality assurance of clinical pharmacy services

SECTION – II

Q.5 Answer **ANY FIVE** of the following: **[10]**

a) What is Phase – II clinical trial?
b) What is the need for poison information services?
c) Give importance of approval of a drug.
d) What is the aim of Pharmacovigilance?
e) Define clinical trial.
f) What are the requirements for setting Drug Information Centre?
g) Explain in brief any one mechanism of Adverse Drug Reaction (ADR).

Q.6 **a)** Discuss critical evaluation of drug information and literature. **[08]**
b) Discuss preparation of verbal and written Drug Information Reports. **[07]**

Q.7 **a)** Explain organization and resources of Poison Information (PI) services. **[08]**
b) Discuss role of Pharmacist in management of Adverse Drug Reactions (ADRs). **[07]**

Q.8 Write note on **ANY THREE** of the following: **[15]**

a) Good Clinical Practices (GCP)
b) Phase 'O' trial
c) Predisposing factors for Adverse Drug Reactions (ADRs)
d) Role of Pharmacist in clinical trial

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FINAL YEAR B.PHARM. SEMESTER-VII (2011 COURSE) :
SUMMER - 2018

SUBJECT : Dosage Form Design IV

Day : **Saturday** | **S-2018-3978** | Time : **02.00 PM TO 05.00 PM**
Date : **28/04/2018** | Max. Marks : 80

N.B.:

1) **Q.No.1** and **Q.No.5** are **COMPULSORY**. Out of the remaining questions attempt **ANY TWO** questions from each section.
2) Answers to both the sections should be written in **SEPARATE** answer books.
3) Draw neat and labeled diagram **WHEREVER** necessary.
4) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 Attempt **ANY FIVE** of the following: **(10)**

a) Explain how CDDS are superior to sustained release formulations?
b) Draw neat diagram of ocusert system.
c) What are compudose subdermal implants?
d) Explain Brandt model in CDDS.
e) Give the significance of fillers in silicon elastomers.
f) What are Nitroder systems?
g) Draw a neat diagram of Alzet osmotic pump.

Q.2 **a)** Classify activated modulated DDS and discuss iontophoretically activated DDS. **(08)**
b) Discuss designing of matrix diffusion controlled DDS. **(07)**

Q.3 **a)** Explain how hydrodynamic diffusion layer influences release profiles of drug. **(08)**
b) Discuss mechanistic approach for release profiles of drug from membrane permeation DDS. **(07)**

Q.4 Write notes on **ANY THREE:** **(15)**

a) Pennkinetic systems.
b) Dynamics of GIT and its influence on drug release.
c) Feedback regulated DDS.
d) Mechanism of drug release from matrix DDS.
e) Consideration of GI tansit in oral DDS.

SECTION –II

Q.5 Answer **ANY FIVE** of the following: **(10)**

a) Differentiate between GMP and cGMP.
b) Define retrospective validation.
c) Explain instability due to moisture.
d) Differentiate between QA and QC.
e) Enumerate various IPQC tests in production of tablets.
f) State any two duties of coordinator in GLP.
g) State the importance of cleaning validation.

Q.6 **a)** Discuss GMP in relation to building facilities. **(08)**
b) Discuss various components of GLP. **(07)**

Q.7 **a)** Discuss process validation. Give the procedure for validation of an autoclave. **(08)**
b) Discuss documentation and its significance. **(07)**

Q.8 Write notes on (**ANY THREE**): **(15)**

a) ICH stability guidelines.
b) Mix up and cross contamination.
c) Concept of TQM.
d) Evaluation of preservatives.
e) Cleaning validation.

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FINAL YEAR B.PHARM. SEMESTER-VII (2011 COURSE) :

SUMMER - 2018

SUBJECT: MEDICINAL CHEMISTRY- III

Day: **Saturday** Time: **02.00 PM TO 05.00 PM**

Date: **21/04/2018** **S-2018-3976** Max Marks: 80

N.B:

1) **Q.No 1**and **Q.No. 5** are **COMPULSORY**. Out of the remaining solve Any **TWO** questions from each section.
2) Both the sections should be written in **SEPARATE** answer books.
3) Figures to the **RIGHT** indicate full marks.

SECTION-I

Q.1 Answer Any **FIVE** of the following: **(10)**

a) Give the structure and IUPAC name of Hexyl resorcinol and Nitrofurazone
b) Sketch out the synthesis of Metronidazole
c) Give examples of any two drugs used in Leishmaniasis
d) Sketch out the synthesis of Isoniazide
e) Give the structure of furazolidone, Chloroquine.
f) Write down the structure of any two Cinchona alkaloid.

Q.2 What are antineoplastic agents? Give their classification. Explain in detail alkylating agents as antineoplastic drugs. **(15)**

Q.3 Why treatment to mycobacterial infection is difficult? Discuss in detail agents used in the treatment of Tuberculosis. **(15)**

Q.4 Write short notes on Any **THREE** of the following: **(15)**

a) Antiamebic agents
b) Life cycle of malarial parasite
c) Interferons
d) Anthelmintics

SECTION-II

Q.5 Answer Any **FIVE** of the following: **(10)**

a) Give examples of sulfonamides having intermediate and short duration of action
b) Sketch out the synthesis of Sulfadiazine
c) Why natural penicillin cannot be formulated as solution
d) Give two examples of Flouroquinolones along with their structures
e) Give two examples of Cephalosporins
f) What is 6APA? Give structure of any drug containing 6APA structure.

Q.6 a) What are sulfonamides? Give chemical classification with suitable examples. Write down the synthesis of any two Sulfonomides. **(15)**

Q.7 Define the term Antibiotic. Give chemical classification along with suitable examples and write in short Macrolide antibiotics.

Q.8 Write short notes on Any **THREE** of the following: **(15)**

a) Antacids
b) Quinolone antibacterials
c) Polyene antibiotics
d) Purgatives

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FINAL YEAR B.PHARM. SEMESTER-VII (2011 COURSE) :
SUMMER - 2018

SUBJECT : PHARMACEUTICAL ANALYSIS – V

Day : **Tuesday** | **S-2018-3977** | Time : **02.00 PM TO 05.00 PM**
Date : **24/04/2018** | Max. Marks : 80

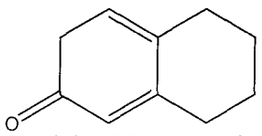
N.B.

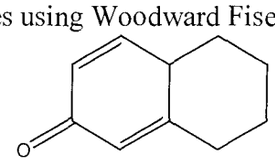
1) Q.1 and Q.5 are **COMPULSORY.** Out of the remaining attempt any **TWO** questions from Section – I and any **TWO** questions from Section – II.
2) Answers to the two sections should be written in **SEPARATE** answer book.
3) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 Answer any **FIVE** of the following **(10)**

a) Define wave number and frequency.
b) Explain concept of Instrumental Analysis.
c) Define the term chromophore.
d) Differentiate the following structures using Woodward Fiser rule.

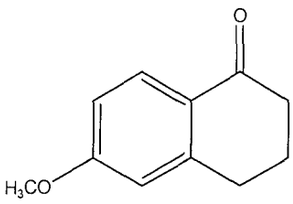


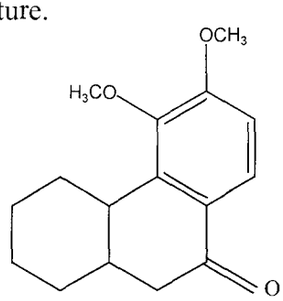


e) Explain 'Holographic gratings.
f) List out properties of molecules used for instrumental analysis.

Q.2 **a)** Write the effect of conjugation on λmax, explain with examples. **(08)**

b) Predict λmax for the following structure. **(07)**





Q.3 **a)** Explain the construction working and advantages of PMT. **(08)**

b) List out dispersive elements used in spectral instrumentation and describe in detail 'gratings'. **(07)**

Q.4 Write short notes on any **THREE** of the following: **(15)**

a) Woodward Fisers rule for enones.
b) Classification of instrumental methods of analysis with types of atomic and molecular interactions.
c) Raman spectroscopy
d) Quantitative analysis by UV spectroscopy.

P.T.O.

SECTION – II

Q.5 Answer any **FIVE** of the following **(10)**

a) Write the basic requirement of a molecule to be IR active.
b) List out factors affecting fluorescence.
c) Calculate the vibrational degrees of freedom of a linear molecule with 10 atoms.
d) Explain the principle of phosphorimetry.
e) List out the detectors used in IR spectroscopy.
f) Advantages of Raman spectroscopy over IR spectroscopy

Q.6 **a)** How IR spectroscopy is useful to distinguish following structures **(08)**

i) $CH_3\text{-}CH_2\text{-}CH_2\text{-}CH_2OH$ $\qquad$ $CH_3\text{-}CH_2\text{-}CH_2\text{-}\overset{\overset{O}{\|}}{C}\text{-}H$

ii) $CH_2{=}CH\text{-}CH{=}CH_2$ $\qquad$ $CH_3\text{-}CH_2\text{-}CH_2\text{-}CH_3$

b) Write a note on molecular vibrations **(07)**

Q.7 Explain in details instrumentation, advantages and disadvantages of fluorimetry **(15)**

Q.8 Write short notes on any **THREE** of the following: **(15)**

a) Principle and applications of turbidimetry
b) Necessary conditions for quantitation by nepheloturbidometry
c) Sampling methods by IR spectroscopy
d) Compare nephelometry, turbidometry and UV spectrometry

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FINAL YEAR B.PHARM. SEMESTER-VII (2011 COURSE) :
SUMMER - 2018
SUBJECT: PHARMACOGNOSY-III

Day: **Monday** Time: **02.00 PM TO 05.00 PM**
Date: **07/05/2018** Max. Marks: 80.

S-2018-3981

N.B.:

1) Q. No. 1 and Q. No. 5 are **COMPULSORY**. Out of the remaining solve any **TWO** questions from each section.
2) Figures to the **RIGHT** indicate full marks.
3) Draw neat labeled diagrams **WHEREVER** necessary.

SECTION-I

Q.1 Answer **ANY FIVE** of the following: **(10)**

a) Differentiate between Indian Senna and Alexandrian Senna
b) Differentiate between Pale catechu and Black catechu
c) Draw transverse section of Ginger
d) Write down biological source and chemical constituents of Khellin
e) Write down biological source and chemical constituents of Psoralea
f) Define pseudo tannins

Q.2 **a)** Give Pharmacognostical details of Turmeric **(08)**
b) Give Pharmacognostical details of Hirda **(07)**

Q.3 **a)** Give Pharmacognostical details of Gingko **(08)**
b) Give Pharmacognostical details of Aloe **(07)**

Q.4 Write short notes on **ANY THREE** of the following: **(15)**

a) Flavonoids
b) Henna
c) Rosemary
d) Hops

SECTION-II

Q.5 Answer **ANY FIVE** of the following: **(10)**

a) Give biological source and chemical constituents of Digitalis
b) Give biological source and chemical constituents of Mentha
c) Draw transverse section of Rauwolfia
d) Draw transverse section of Dill
e) What is Enflurage?
f) What is Ecuelle?

Q.6 **a)** Give Pharmacognostical details of Ephedra **(08)**
b) Give Pharmacognostical details of Opium **(07)**

Q.7 **a)** Give Pharmacognostical details of Cinchona **(08)**
b) Give Pharmacognostical details of Clove **(07)**

Q.8 Write short notes on **ANY THREE** of the following: **(15)**

a) Tropane alkaloid
b) Black pepper
c) Life cycle of ergot
d) Imidazole alkaloid

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FINAL YEAR B.PHARM. SEMESTER-VIII (2011 COURSE) :
SUMMER - 2018
SUBJECT : DRUG REGULATORY AFFAIRS

Day : **Thursday**
Date : **03/05/2018**

Time : **02.00 PM TO 05.00 PM**
Max. Marks : 80

S-2018-3986

N.B.:

1) **Q.No.1** and **Q.No.5** are **COMPULSORY**. Out of the remaining questions attempt **ANY TWO** questions from each section
2) Answers to both the sections should be written in **SEPARATE** answer books.
3) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 Attempt **ANY FIVE** of the following: **[10]**

a) What is composition of Joint Pharmacy Council?
b) Write in brief importance of Education Regulation.
c) What is loan license?
d) What is DCC?
e) Write functions of Central Drug Laboratory (CDL).
f) What is ceiling price?
g) Which are different requirement for drug store under D and C Act?

Q.2 **a)** Discuss functions and responsibilities of Government Analyst. **[08]**
b) What are different administrative bodies under D and C Act? **[07]**

Q.3 **a)** Explain qualification and duties of Drug Inspector. **[08]**
b) Write in detail about DTAB. **[07]**

Q.4 Write short notes on **ANY THREE** of the following: **[15]**

a) Schedule C and C_1
b) Schedule M
c) Schedule X
d) State Pharmacy Council

SECTION – II

Q.5 Attempt **ANY FIVE** of the following: **[10]**

a) Explain formula used for calculation of MRP under DPCO.
b) Explain pre-grant opposition of patent.
c) What is patentability?
d) Define compulsory license.
e) What is not patentable?
f) What is ASU?

Q.6 **a)** Elaborate offences and penalties under NDPS. **[08]**
b) Write note on DPCO. **[07]**

Q.7 **a)** Discuss salient features of Indian Patent System. **[08]**
b) Explain salient features of Medicinal and Toilet Preparation Act, 1955. **[07]**

Q.8 Write short notes on **ANY THREE** of the following: **[15]**

a) Pharmacist in relation to his job
b) WHO guidelines
c) Cannabis and cocoa derivative
d) Illicit traffic

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FINAL YEAR B.PHARM. SEMESTER-VIII (2011 COURSE) :
SUMMER - 2018

SUBJECT: MEDICINAL CHEMISTRY- IV

Day: **Friday** **S-2018-3982** Time: **02.00 PM TO 05.00 PM**
Date: **20/04/2018** Max Marks: 80

N.B:

1) **Q.No 1**and **Q.No. 5** are **COMPULSORY**. Out of the remaining solve Any **TWO** questions from each section.
2) Both the sections should be written in **SEPARATE** answer books.
3) Figures to the **RIGHT** indicate full marks.

SECTION-I

Q.1 Answer Any **FIVE** of the following: **(10)**

a) Write the structure of any two steroidal estrogen.
b) Give any two examples of eicosanoids along with one structures.
c) Applications of QSAR
d) Sketch out the synthesis of pyralamine
e) Write down the synthesis of any non-steroidal estrogen.
f) Write down the applications of antihistaminics.

Q.2 What are Glucocorticoids? Give their chemistry, SAR, MOA and uses. **(15)**

Q.3 Classify antihistaminic. Give an account of agents from amino Alkyl ether and ethylene diamine class. **(15)**

Q.4 Write short notes on Any **THREE** of the following: **(15)**

a) Methods of QSAR
b) Side effects of morphine
c) SAR of H2 antagonist
d) Nomenclature of prostaglandins

SECTION-II

Q.5 Answer Any **FIVE** of the following: **(10)**

a) Write down any two structures of NSAID from salicylic acid class.
b) Sketch out the synthesis of any one oral hypoglycemic agents.
c) Give any two example of ant thyroidal agents.
d) Give any two example of anticoagulants with their structure.
e) Enlist various radio opaque diagnostic agents.
f) Write down the structure and IUPAC name of warfarin/ phenindione.

Q.6 Discuss the chemistry, metabolic effects, SAR and synthesis of thyroid hormone **(15)**

Q.7 Explain insulin and its preparations and explain in detail arylalkonic acid class of NSAIDS. **(15)**

Q.8 Write short notes on Any **THREE** of the following: **(15)**

a) Combinational chemistry
b) Blood coagulation process
c) Agents used for liver and kidney function test.
d) Pyrazolone class of NSAIDS

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Final Year B.Pharm-Sem-VIII (2011 Course): SUMMER-2018

SUBJECT : PHARMACEUTICAL ANALYSIS – VI

Day : Monday
Date : 23-04-2018

Time : 2:00 P.M. TO 5:00 P.M.
Max. Marks : 80

S-2018-3983

N.B.:

1) **Q.No.1** and **Q.No.5** are **COMPULSORY**. Out of the remaining questions attempt **ANY TWO** questions from each section
2) Answers to both the sections should be written in the **SEPARATE** answer books.
3) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 Attempt **ANY FIVE** of the following: **[10]**

a) What do you mean by Pecisscional frequency?
b) Write the basic principle of Atomic absorption spectroscopy.
c) Write the limitations of flame photometry.
d) Explain double resonance.
e) What is n + 1 rule in NMR?
f) Write the ^{1}H NMR chemical shift value for COOH, CHO, Acetylene and Cyclopropane.

Q.2 **a)** Explain chemical shift. Write the factors affecting chemical shifts. **[08]**
b) Discuss Spin – Spin Coupling in detail. **[07]**

Q.3 Explain the instrumentation of Atomic absorption Spectroscopy and discuss the interferences involved. **[15]**

Q.4 Write a note on **ANY THREE** of the following: **[15]**

a) Burners in flamephotometry
b) Shielding and deshielding
c) Differences between Atomic absorption spectroscopy and flame emission spectroscopy
d) Integration in NMR

SECTION – II

Q.5 Attempt **ANY FIVE** of the following: **[10]**

a) What is concept of Immunoassay?
b) What do you mean by method sensitivity?
c) Define Validation.
d) Explain the term base peak in MS.
e) What is principle of TGA?
f) Enlist any four mass analyzers.

Q.6 Classify mass analyzers, describe principle, working, instrumentation, advantages and applications of TOF mass analyzers. **[15]**

Q.7 Classify thermal methods of analysis and describe types, theory, instrumentation and applications of DSC. **[15]**

Q.8 Write a note on **ANY THREE** of the following: **[15]**

a) Types of ELISA technique
b) Sector mass analyzer
c) Instrumentation and applications of RIA techniques
d) Analytical method stability

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FINAL YEAR B.PHARM. SEMESTER-VIII (2011 COURSE) :
SUMMER - 2018
SUBJECT: PHARMACEUTICAL MANAGEMENT

Day: **Saturday** Time: **02.00 PM TO 05.00 PM**

Date: **05/05/2018** **S-2018-3987** Max Marks: 80

N.B:

1) Q. No **1** and **5** are **COMPULSORY**.
2) Attempt any **TWO** questions from each section.
3) Use separate answer sheets for both the sections.
4) Figures to the right indicate **FULL** marks.

SECTION-I

Q.1 Solve any **FOUR** of the following: **(10)**

a) Enlist any two provisions in Indian patent act 2005
b) Define management. Why it is both art and science?
c) Define strategy
d) Define process validation
e) Define BEP

Q.2 **a)** Discuss system approach to management. **(08)**
b) Discuss process of decision making. **(07)**

Q.3 **a)** Give detailed account of MBO process. **(08)**
b) Discuss organization by geography. **(07)**

Q.4 Write notes on **ANY THREE** of the following: **(15)**

a) Decentralization
b) Staffing in an enterprise
c) Leadership traits
d) Line and staff relationship

SECTION-II

Q.5 Solve any **FOUR** of the following: **(10)**

a) Factors influencing organizational structure.
b) What is effective material management techniques?
c) What are functions of inventory control?
d) What is concurrent validation?
e) State the scope of GLP.

Q.6 **a)** Discuss components of GLP. **(08)**
b) Discuss maintenance and calibration of equipment's. **(07)**

Q.7 **a)** Define SOP and discuss its components. **(08)**
b) Discuss product life cycle. **(07)**

Q.8 Write notes on **ANY THREE** of the following: **(15)**

a) Features of ISO 9000-2001 series
b) Internal quality audits
c) Methods to improve productivity
d) Effective material management

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FINAL YEAR B.PHARM. SEMESTER-VIII (2011 COURSE) :
SUMMER - 2018
SUBJECT: PHARMACOGNOSY- IV

Day: **Monday** Time: **02.00 PM TO 05.00 PM**
Date: **30/04/2018** **S-2018-3985** Max. Marks: 80

N.B.:

1) **Q. No. 1** and **Q. No. 5** are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from each section.
2) Figures to the right indicate **FULL** marks.
3) Answers to both the sections should be written in **SEPARATE** answer books.
4) Draw neat and labelled diagram **WHEREVER** necessary.

SECTION-I

Q.1 Answer any **FIVE** of the following: **(10)**

a) What is Bhavana process?
b) What is Avami?
c) Give uses of Triphala churna.
d) Give biological source and uses of Giloy.
e) What is Kukkuta puta?
f) Explain the uses of Dhataki pushpa in Asava.

Q.2 **a)** Explain the method of preparation of Loha bhasma and elaborate its evaluation parameters. **(08)**
b) Explain the method of preparation of Drakshasav and elaborate its evaluation parameters. **(07)**

Q.3 **a)** Give the uses of Lhasun and enlist its marketed preparation. **(08)**
b) Give the uses of Shatavari and enlist its marketed preparation. **(07)**

Q.4 Attempt any **THREE** of the following: **(15)**

a) Amla Kwath
b) Trikatu Churna
c) Kumara Asava
d) Rajat Bhasma

SECTION-II

Q.5 Answer any **FIVE** of the following: **(10)**

a) Give uses of Streptokinase.
b) Give uses of Serratiopeptidase.
c) Give the biological source and uses of Taxol.
d) Give uses of Omega 3 fatty acids.
e) Give the biological source and uses of Silymarin.
f) Give the biological source and uses of Digoxin.

Q.6 **a)** Write an exhaustive note and therapeutic profile of Hypericin. **(08)**
b) Explain the method of isolation of Camptothecin. **(07)**

Q.7 **a)** Give the chemistry and therapeutic profile of Guggulipids **(08)**
b) Explain the method of isolation of Vinblastin. **(07)**

Q.8 Attempt any **THREE** of the following: **(15)**

a) Etoposide.
b) Method of isolation of Resveratral.
c) Artemisinin.
d) Boswellic acid.

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FINAL YEAR B.PHARM. SEMESTER-VIII (2011 COURSE) :
SUMMER - 2018
SUBJECT: PHARMACOLOGY-IV

Day: **Friday** Time: **02.00 PM TO 05.00 PM**
Date: **27/04/2018** **S-2018-3984** Max.Marks:80

N.B.:

1) **Q.no.1** and **5** are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from Section - I and any **TWO** questions from Section - II
2) Answer to the two sections should be written in **SEPARATE** answer books.
3) Figures to the right indicate **FULL** marks.

SECTION –I

Q.1 Answer the following (**ANY FIVE**) **(10)**

a) Classify anti-tubercular drugs.
b) What are alkylating agents?
c) Classify Sulphonamides.
d) Mention the side effect associated with Streptomycin.
e) Write the mechanism of action of Penicillins.
f) Enlist the drugs used for Leprosy.

Q.2 **a)** Describe the pharmacology of Teyracylines. **(08)**

b) Classify sulphonamides with a note on their mechanism of action and adverse effects. **(07)**

Q.3 **a)** Discuss the pharmacotherapy for Tuberculosis. **(08)**

b) Describe the drug treatment in Pregnant women. **(07)**

Q.4 Write short notes on (**ANY THREE**) **(15)**

a) Treatment for Protozoal infections.
b) Macrolide antibiotics.
c) Quinolones and Fluoroquinolones.
d) Anti-fungal agents.

SECTION –II

Q.5 Answer the following (**ANY FIVE**) **(10)**

a) Classify oral hypoglycemics.
b) What are the side effects associated with corticosteroids?
c) Write the names of hormones secreted from the anterior pituitary gland.
d) Write the uses of uterine relaxants.
e) Mention the uses of Anti-estrogens.
f) Write the biosynthesis of peptides.

Q.6 **a)** Write the physiology of Thyroxin and add a note on anti-thyroid drugs. **(08)**

b) Write the importance of Chronopharmacology. **(07)**

Q.7 **a)** What are the androgens? Write the pharmacology of Testosterone. **(08)**

b) Write a note on Oxytocin. **(07)**

Q.8 Write short notes on (**ANY THREE**) **(15)**

a) Peptide antagonists
b) Insulin
c) Immunosuppressants
d) Oral contraceptives

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