Subject Code: BP401T

Roll No:

BPHARM

(SEM IV) THEORY EXAMINATION 2021-22

PHARMACEUTICAL ORGANIC CHEMISTRY III – THEORY

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	Define enantiomers with examples.
b.	Define meso compounds with examples.
c.	Distinguish between E and Z isomers with examples.
d.	Discuss sequence rules.
e.	Compare the reactivity and aromaticity of pyrrole, furan and thiophene.
f.	What is the reduction product of furan? Give its reaction.
g.	Discuss the structure and pharmaceutical uses of Oxazole.
h.	Write the pharmaceutical uses of quinoline and isoquinoline.
i.	Write the synthetic importance of Birch reduction.
j.	Discuss the Claisen Schmidt condensation reaction.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Outline the various conformations of cyclohexane in detail.
b.	Classify heterocyclic compounds. Discuss the nomenclature of heterocyclic compounds with suitable examples.
c.	Write down the synthesis, reactions and medicinal uses of Imidazole and Thiazole.

SECTION C

3. **Attempt any *five* parts of the following:** **5 x 7 = 35**

a.	Describe DL system of nomenclature of optical isomers with suitable example.
b.	Describe stereo isomerism in biphenyl compounds and its conditions for optical activity.
c.	Write down the synthesis, reactions, and medicinal uses of Pyrrole and Thiophene.
d.	Describe in detail about the stereospecific and stereoselective reactions with examples.
e.	Write down the synthesis and medicinal uses of Pyridine also discuss basicity of Pyridine.
f.	Discuss in detail about the synthesis and pharmaceutical uses of pyrimidine and purine.
g.	Discuss the reaction and mechanism of Metal hydride reduction.

Sub Code:BP401T

Paper Id: 910026 Roll No:

B. PHARM
(SEM-IV) THEORY EXAMINATION 2019-20
PHARMACEUTICAL ORGANIC CHEMISTRY III

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.
2. Any special paper specific instruction.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a.	Differentiate chiral and achiral molecule.
b.	Explain E and Z isomers with suitable example.
c.	Draw conformers of ethane.
d.	Write any two synthetic procedures for preparation of pyrrole.
e.	Why meso compounds are optically inactive?
f.	Draw structure of any two five member heterocyclic compound and their use.
g.	Name the reducing agent used in Clemmensen reduction.
h.	Give chemical reaction used for conversion of Aldehyde directly into Alkane.
i.	Give structure and use of imidazole.
j.	Define term d, l, D and L

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a.	What is racemic modification? How can you resolute racemic mixture?
b.	Give definition and reaction mechanism for Wolff kishner and Dakin raction.
c.	Give preparation, properties and medicinal uses of pyridine.

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

a.	Give RS system of nomenclature of optical isomers with sequence rules.
b.	Write a note on stereospecific and stereoselective reaction.
c.	Explain partial and absolute asymmetric synthesis.
d.	Give synthesis and medicinal uses of pyrrole.
e.	Give importance of $LiAlH_4$ in metal hydride reduction.
f.	Give reaction and mechanism for Schimdt rearrangement.
g.	Give synthesis, properties and medicinal use of azepines and their derivatives.

Printed Pages: 01 **Sub Code: BP401T**

Paper Id: **150299** **Roll No.** | | | | | | | | | | |

B PHARM

(SEM IV) THEORY EXAMINATION 2018-19

PHARMACEUTICAL ORGANIC CHEMISTRY –III

Time: 3 Hours **Total Marks: 75**

Note: Attempt all Sections. If you require any missing data, choose suitably.

SECTION A

1. Attempt all questions in brief **10 x 2 = 20**

a) Give the structure and uses of imidazole and indole
b) Why study of stereochemistry in chemistry is important.
c) Write about dakin reaction
d) Discuss about the basicity of pyridine
e) What are meso compounds
f) What is partial and absolute symmetric synthesis
g) What are stereospecific and stereoselective reactions
h) What is D and L nomenclature
i) Write the synthesis of furan
j) What are the conditions of optical isomerism

SECTION B

2. Attempt any two parts of the following: **2 X 10 = 20**

a) Write about nomenclature and methods of determination of geometrical isomerism with examples
b) Discuss with examples the rules of nomenclature and classification of heterocyclic compounds
c) Give synthesis and reactions of i) thiophene ii) imidazole

SECTION C

3. Attempt any five parts of the following: **7 X 5 = 35**

a) Give short note on wolf-kishner reduction
b) Explain the Beckmann rearrangement reaction with examples
c) Write the synthesis and medicinal uses of pyrimidines and purine derivatives
d) Discuss about stereoisomerism in biphenyl compounds
e) Give synthesis of oxazole and thiazole with their medicinal uses
f) Compare aromaticity and reactivity of pyrrole and furan
g) Discuss optical isomerism with examples

PAPER ID 421119

Roll No:

BPHARM
(SEM IV) THEORY EXAMINATION 2021-22
MEDICINAL CHEMISTRY I – THEORY

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a.	Define metabolism.
b.	Point out the role of partition coefficient in relation to biological action of drug?
c.	Describe the synthesis of Tolazoline.
d.	Give structure and uses of Phenylephrine.
e.	Discuss cholinergic receptors and their distribution.
f.	Differentiate anticholinergics and anticholinesterases.
g.	Compare the basic ring structures and mention uses of barbiturate and benzodiazepine.
h.	Give the MOA and structure of chlorpromazine.
i.	Discuss the synthesis of drug that causes dissociative anaesthesia.
j.	Name and give structures of any two narcotic antagonists.

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a.	Summarize about various physicochemical parameters that affect drug action.
b.	Classify sedative and hypnotics. Outline the synthesis, mechanism of action and uses of diazepam.
c.	Classify NSAIDs. Give the synthesis of Ibuprofen.

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

a.	Compare phase I and phase II metabolism. Discuss various factors affecting drug metabolism.
b.	Outline the classification and SAR of sympathomimetics.
c.	Illustrate the MOA, synthesis and uses of (i) Dicyclomine hydrochloride (ii) Carbachol.
d.	Classify anticonvulsants and give synthesis of phenytoin.
e.	Classify general anaesthetics. Give synthesis of halothane.
f.	Explain the biosynthesis and catabolism of catecholamines.
g.	Give synthesis of propranolol and discuss SAR of beta blockers.

Sub Code:BP402T

Paper Id: 910027 Roll No:

B PHARM
(SEM-IV) THEORY EXAMINATION 2019-20
MEDICINAL CHEMISTRY – I

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.
2. Any special paper specific instruction.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a. Define solubility.
b. What is ring equivalent bioisosterism.
c. Write the mode of action of methyldopa.
d. Write the synthetic route of Phenylephrine.
e. Define parasympatholyticc agents.
f. Classify cholinesterase inhibitors.
g. What are the ideal characteristic of sedatives and hypnotics.
h. Draw the chemical structure of Clonazepam and write mode of action
i. Write the synthetic route of halothane.
j. Write the mode of action of Ultra short acting barbitutrates.

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a. Explain in detail about isosterism and bioisosterism with suitable examples.
b. Discuss the SAR beta blocker and write the mode of action synthesis of propanolol.
c. Write the chemical structure, mode of action, synthesis and use of carbachol and procyclidine.

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

a. Discuss the SAR of barbiturate with suitable examples.
b. Classify anti-inflammatory agents. Discuss the chemical structure mode of action and synthesis of ibuprofen.
c. Describe geometrical isomerism in relation to affect biological activity.
d. Discuss in detail about indirect acting sympathomimetic agents.
e. Classify anticonvulsant drugs and Explain SAR of succinimide. Write the mechanism of action and synthesis of ethosuccimide.
f. Discuss the SAR of morphine analogues. Write the mechanism of action and synthesis of fentanyl.
g. Write a short note on dissociative anaesthetics.

Printed Pages: 01 **Sub Code: BP402T**

Paper Id: 150300 **Roll No.** | | | | | | | | | | |

B.PHARM
(SEMESER-IV) THEORY EXAMINATION 2018-19
MEDICINAL CHEMISTRY-I

Time: 3 Hours ***Total Marks: 75***

Note: Attempt all Sections. If you require any missing data, choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a. Define partition coefficient and give its applications.

b. Explain role of ionization towards biological action of drug.

c. Explain in short biosynthesis of cholinergic neurotransmitters.

d. Write chemical structures of phenytoin and Ethotoin.

e. Write chemical structure and uses of Ketamine hydrochloride.

f. Write differences between Narcotic and non-narcotic analgesics.

g. Compare benzodiazepines and barbiturates.

h. Write synthesis of Ethosuximide.

i. Write chemical structure and mechanism of action for Clozapine.

j. Define ultra-short acting barbiturates with examples.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a. Define biotransformation. Explain principles of drug metabolism including phase I and phase II pathways.

b. . Write classification, mechanism of action and structure-activity relationship of antipsychotics with suitable examples.

c. Explain Bioisosterism, types and their role in drug discovery with suitable examples.

SECTION C

3. Attempt any *five* parts of the following: **5 x7 = 35**

a. Stereochemistry contributes towards biological action of drug. Explain with examples.

b. Write synthesis, mechanism of action and uses of -
i) Ipratropium bromide, ii) Tolazoline.

c. Write a note on medicinal chemistry of barbiturates.

d. Define adrenergic blockers. Explain structure-activity relationship studies and uses of beta blockers.

e. Write classification of parasympathomimetics with examples and chemical structures. Write synthesis of Carbachol.

f. Write synthesis, mechanism of action and uses of –
(i) Chlorpromazine hydrochloride, (ii) Carbamazepine.

g. Write chemical structures, uses of – i) Indomethacin, ii) Valproic acid, iii) Phenacetin, iv) Meperidine hydrochloride, v) Sulindac.

PAPER ID-421533

Subject Code: BP403T

Roll No:

BPHARM
(SEM IV) THEORY EXAMINATION 2021-22
PHYSICAL PHARMACEUTICS II – THEORY

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.
2. Any special paper specific instruction.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a.	Classify dispersed systems with examples.
b.	Define peptization with example.
c.	State the Law of Flow.
d.	State the Heckel equation and explain each term involved.
e.	State the nature of flocculated and deflocculated suspensions.
f.	Mention the advantages of microemulsions over emulsions.
g.	Define 'cut diameter of a sieve' with suitable example.
h.	Name the parameters involved in the evaluation of flow properties of a pharmaceutical blend.
i.	What do you mean by 'pseudo-zero order kinetics'?
j.	Mention the role of dielectric constant on the chemical degradation of pharmaceutical products.

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a.	Explain the effects of electrolytes, coacervation, and peptization on pharmaceutical colloidal preparations.
b.	Describe in brief the various methods used for the determination of particle size.
c.	Explain the roles of the various physical and chemical factors on the chemical degradation of pharmaceutical products.

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

a.	Classify colloids and compare the general properties of colloidal dispersions.
b.	Describe the effects of thixotropy in pharmaceutical formulations, with suitable examples.
c.	Describe the theories of emulsification.
d.	State and explain the evaluation parameters used for characterization of the derived properties of powders.
e.	Explain the steps for determination of order of a chemical reaction.
f.	Mention the working principles and applications of capillary, falling sphere, and rotational viscometers used for the determination of viscosity.
g.	Write a brief note on photolytic degradation of pharmaceutical preparations and its prevention.

Sub Code:BP403T

Paper Id: 910028 Roll No:

B PHARM
(SEM-IV) THEORY EXAMINATION 2019-20
PHYSICAL PHARMACEUTICS-II

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION – A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a. Define peptization.
b. Explain Schulze -Hardy rule.
c. Give two applications of thixotropy in formulation.
d. Give example of multipoint viscometer.
e. Define deflocculated suspension.
f. Give two examples of Cationic and non ionic surfactant.
g. Differentiate between true density and bulk density.
h. What are the disadvantages of microscopic method?
i. Write the unit of specific rate constant of zero order reaction and second orderreaction.
j. Explain the term expiry date and half life of a drug.

SECTION – B

2. Attempt any two of the following: **2x10 = 20**

a. Explain the different categories of non-Newtonian fluid based on the different pattern of rheogram.
b. Explain the working principle of Andreasen apparatus with the help of a labelled diagram.
c. Compute the accelerated stability testing for determination of expiration dating of pharmaceutical dosage forms

SECTION – C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a. Write about the kinetic & electrical properties of colloidal dispersion.
b. Explain the optical properties of colloids
c. Describe the stress, strain and Heckle equation
d. Write a note on thixotropy.
e. Explain the working principle of Andreasen apparatus with the help of a labelled diagram.
f. Define zero order reactions. Give equations for determining shelf life and half-life for the same.
g. Enumerate the difference between flocculated and deflocculated suspensions

Printed Pages: 01 **Sub Code: BP403T**

Paper Id: 150301 **Roll No.** | | | | | | | | | | |

B PHARM
(SEM IV) THEORY EXAMINATION 2018-19
PHYSICAL PHARMACEUTICS II

Time: 3 Hours ***Total Marks: 75***

Note: Attempt all Sections. If you require any missing data, choose suitably.

SECTION – A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a. Define peptization.
b. Explain Schulze -Hardy rule.
c. Give applications of plugflow in formulation.
d. Give example of multipoint viscometer.
e. Define deflocculated suspension.
f. What is term Micro-emulsion.
g. Differentiate between Martin and projected diameter.
h. What are the disadvantage of microscopic method?
i. Give Heckel Equation and its importnace
j. Explain the term kinematic viscostity.

SECTION – B

2. Attempt any two of the following: **2x10 = 20**

a. Explain the non-Newtonian fluisd on the basis of rheogram, molecular mechanism, mathematical equation and suitablexample.
b. Explain the working principle of Andreasen apparatus with the help of a labelled diagram and also give method for size determination.
c. Compute the accelerated stability testing for determination of expiration dating of pharmaceutical dosage forms

SECTION – C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a. Discuss the electrical properties of colloidal dispersion.
b. Explain the derive properties of powders
c. Describe film the theory of emulsion.
d. What is thixotropy. Give its application in depot injection.
e. Explain the working principle of rotational viscometer with the help of a labelled diagram.
f. Define zero order reactions. Give equations for determining shelf life and half-life for the same.
g. Enumerate the difference between flocculated and deflocculated suspensions

Roll No:

BPEARM
(SEM IV) THEORY EXAMINATION 2021-22
PHARMACOLOGY I – THEORY

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a.	Examine advantages and disadvantages of oral routes of administration.
b.	Define the terms bioavailability.
c.	Elaborate therapeutic index and synergism.
d.	Explain mechanism of action of local anesthetics.
e.	Demonstrate the synthesis, storage and release of adrenaline diagrammatically.
f.	Enlist drugs used for open angle glaucoma.
g.	Define and classify neurotransmitters.
h.	Compare general and local anesthetic agents.
i.	Classify drugs for Alzheimer's disease.
j.	Compare drug addiction and habituation.

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a.	Explain various drug receptor signal transducer mechanisms.
b.	Summarize antiepileptic drugs and their mechanisms. Explain pharmacology of sodium valproate. https://www.aktuonline.com
c.	Classify opioid analgesics. Discuss pharmacology of morphine.

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

a.	Illustrate various factors affecting drug absorption.
b.	What do you understand by preclinical evaluations? Discuss various clinical trial phases.
c.	Classify anticholinergics. Discuss pharmacological action and uses of atropine.
d.	Summarize steps involved in neurohumoral transmission of autonomic neurons.
e.	Explain various stages of anesthesia. Discuss preanesthetic medication.
f.	Classify drugs for Parkinson's disease. Explain levodopa therapy.
g.	Discuss the mechanism of action, pharmacological actions and uses of Benzodiazepines and barbiturates.

Sub Code:BP404T

Paper Id: 910029 Roll No:

B. PHARM
(SEM-IV) THEORY EXAMINATION, 2019-20
PHARMACOLOGY-I

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a. Define Tachyphylaxis with example.

b. What do you mean by Plateau principle in Pharmacokinetics?

c. Write the significance of STAT in JAK-STAT signaling.

d. What is Phase 0 clinical trial?

e. What do you mean by Cotransmission?

f. Write the clinical uses of Ritodrine and Salbutamol.

g. Write the mechanism of action of Vigabatrin.

h. What is diffusion hypoxia?

i. Write the mechanism of action of Tolcapone and Rasagiline.

j. What do you mean by drug dependence?

SECTION B

2. Attempt any *two*parts of the following: 2 x 10 = 20

a. What is Pharmacovigilance? Explain differentphases of clinical trials in detail.

b. Discuss different pharmacological actions of acetylcholine in detail.

c. Classify peripherally-acting skeletal muscle relaxants. Write a note on pharmacology of Lidocaine.

SECTION C

3. Attempt any *five*parts of the following: 7 x 5 = 35

a. Explain various routes of drug administration in detail.

b. What is biotransformation? Describe the significance of plasma protein binding.

c. Explain signal transduction mechanisms in G-protein-coupled receptor signaling.

d. Discuss the mechanism of action, uses and side effects of Propranolol.

e. Classify Sedatives. Write down the differences between benzodiazepines and barbiturates.

f. Write a short note on Nootropics.

g. Write down the classification of antidepressants and anti-anxiety agents.

Printed Pages: 01 **Sub Code: BP404T**

Paper Id: 150302 **Roll No.** | | | | | | | | | | |

B PHARM
(SEM-IV) THEORY EXAMINATION 2018-19
PHARMACOLOGY-I

Time: 3 Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a. Define Cross Tolerance with example.

b. What is the effect of acidification of urine on excretion of acidic and basic drugs?

c. Explain the effect of competitive antagonist on dose-response curve for an agonist.

d. Differentiate Adverse event (AE) and Adverse drug reaction (ADR).

e. Why atropine is contraindicated in glaucoma?

f. Write the clinical uses of Glycopyrrolate and Isosuxaprine.

g. Differentiate MAO-A and MAO-B inhibitorswith examples.

h. Why Preanesthetic medication is necessary during surgery?

i. What are extrapyramidal side effects?

j. Differentiate natural and acquired tolerance.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a. Discuss different factors modifying drug action.

b. Classify sympatholytics. Discuss the pharmacology of Adrenaline.

c. Write the classification of antiepileptic drugs. Explain the mechanism of action of any four anti-epileptic drugs.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a. What do you mean by Apparent volume of distribution? Explain carrier-mediated drug transport in brief.

b. Give a detail account on essential drugs concept.

c. Write a note on combined effects of drugs.

d. Discuss the mechanism of action, uses and side effects of D-Tubocuraine.

e. Write a note on Neurohumoral transmission in the C.N.S.

f. Write down the classification of antiparkinsonian drugs. Why anti-cholinergics are used in the management of Parkinson's disease?

g. Discuss the pharmacology of chlorpromazine in detail.

Subject Code: BP405T

PAPER ID-221004 Roll No:

BPHARM
(SEM IV) THEORY EXAMINATION 2021-22
PHARMACOGNOSY I – THEORY

Total Marks: 75

Time: 3 Hours

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 10 x 2 = 20

a.	What do you mean by edible vaccines?
b.	Discriminate organized and unorganized crude drugs.
c.	Classify sources of crude drugs.
d.	Mention principle of Unani System of Medicines
e.	Define flavonoids. Write their identification test.
f.	Discuss hallucinogen and teratogens with example.
g.	Write formulae of stomatal index and lycopodium spore methods.
h.	Define hybridization and mutation with example.
i.	Biological source and uses of Jute and hemp.
j.	Enlist different methods of propagation.

SECTION B

2. Attempt any *two* parts of the following: 2 x 10 = 20

a.	Define and classify alkaloids. Describe identification test of alkaloids.
b.	Describe biological sources, chemical composition and uses of any four of the following drugs. a) Honey b) Papain c) Acacia d) Castor oil e) Chaulmoogra oil
c.	Discuss about different factors affecting cultivation of crude drugs with suitable examples.

SECTION C

3. Attempt any *five* parts of the following: 7 x 5 = 35

a.	Write exhaustive notes on Ayurvedic and Homeopathic System of Medicines.
b.	Discuss physical and chemical evaluation parameters of adulteration.
c.	Define and classify glycosides. Discuss chemical test of cardiac and saponin glycosides.
d.	Write notes on a) Auxin and cytokinin b) Novel medicinal plants from marine sources.
e.	Explain in brief about alphabetical, chemical and pharmacological classification of crude drugs.
f.	Describe biological sources, preparations and uses of streptokinase and tragacanth.
g.	Write notes on nutritional requirement and growth of plant tissue culture.

Printed Pages: 01 **Sub Code: BP405T**

Paper Id: 150303 **Roll No.** | | | | | | | | | | |

B.PHARM
(SEM IV) THEORY EXAMINATION 2018-19
PHARMACOGNOSY-I

Time: 3 Hours ***Total Marks: 75***

Note: Attempt all Sections. If you require any missing data, choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a. Define Pharmacognosy.
b. What is taxonomical classification system of crude drugs?
c. What is polyploidy?
d. What is the role of auxin in plant?
e. Enlist various plant tissue cultures.
f. What is totipotency?
g. What is *Tridosh* theory in Ayurveda?
h. What are alkaloids?
i. What is biological source of cotton?
j. What is the pharmaceutical significance of gelatin.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a. What are various types of adulterations involved with herbal drug? Write a detailed note on physical evaluation of crude drugs.
b. What are various factors affecting cultivation of medicinal plants? Discuss with suitable examples.
c. What are various nutritional requirements of plant tissue culture?

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a. Discuss scope & historical developments of Pharmacognosy.
b. What is hybridization? How it is significant in plant cultivation?
c. Write a brief note on edible vaccines.
d. Discuss Ayurvedic system of medicine and its role of pharmacognosy.
e. Define glycosides? Give its classification.
f. Discuss pharmacognostic profile of Honey.
g. Write a note on novel medicinal agents from marine sources.