QP Code : ..... Reg No:.....

FIRST YEAR B.PHARM DEGREE EXAMINATION

(Model Question Paper -2012 Scheme)

Pharmaceutical Chemistry - I

(Inorganic & Physical Chemistry)

Time : 3 hours **Max Marks : 100**

- **Answer all questions**
- **Write equations wherever necessary**

Essay: **(3x10=30)**

1. Discuss the limit test for arsenic and sulphate.
2. Describe the various sources of impurities in pharmaceutical substances.
3. Outline the method of preparation , assay and uses of aluminium hydroxide gel and ammonium chloride.

Short Notes: **(14x5=70)**

4. Explain the method of preparation and assay of hydrogen peroxide.
5. Explain the assay of carbon dioxide
6. Physiological role of iron and copper.
7. Define surface tension and viscocity.
8. Explain the method of preparation, assay and uses of ferrous sulphate.
9. Define refractive index. Explain the working principle of Abay's refractometer.
10. Explain the various methods and importance of quality control.
11. Explain Debye – Huckel theory.
12. Explain optical activity. Describe the working of Polarimeter.
13. Define antidote. How sodium nitrite is used in some specific poisoning.
14. Define electrolytes used in replacement therapy.
15. DEfine assay of chlorinated lime.
16. Explain method of preparation , assay and uses of ferrous Sulphate.
17. Complete and balance the following equations –
    - Boric acid + glycerol
    - $Ca(OCl)Cl + H_2O + CH_3COOH$
    - $Cu SO_4 + KI$
    - $NAF + H_2O$
    - $NH_4Cl + HCHO$

****

QP Code : ..... Reg No:.....

FIRST YEAR B.PHARM DEGREE EXAMINATION

(Model Question Paper -2012 Scheme)

Pharmaceutical Chemistry - II

(Organic Chemistry)

Time : 3 hours **Max Marks : 100**

- **Answer all questions**
- **Write equations wherever necessary**

Essay: **(3x10=30)**

1. Explain the electrophilic reactions of alkenes with any two examples.
2. Explain on resonance , hyperconjugation , mesomeric effect and inductive effect with examples.
3. Explain the mechanism and synthetic application of Cannizaro's reaction and Hoffmann's degradation

Short Notes: **(14x5=70)**

4. Discuss three methods of preparation of alcohols and how do you distinguish between 1 – propanol and 2 – propanol

5. Explain Walden's inversion with example.
6. What is Williamson's synthesis. Explain the action of hydroiodic acid on ethers.
7. Explain Kolbe – Schmidt reaction.
8. Mention two methods of synthesis of nitriles and explain their reactivity.
9. Explain the effects of substituents in electrophilic aromatic substitution.
10. Mention two methods of synthesis and three chemical reactions of carboxylic acids.
11. Explain the aldol and crossed aldol condensation reaction.
12. Describe the functional reactions of nitriles
13. Explain why acyl halides are more reactive then alkyl halides towards nucleophilic substitution reaction.
14. Describe the Fries arrangement and its mechanism.
15. Comment on the basicity of amines.
16. Explain the Bayer's strain theory.
17. Explain the effect of halogen on electrophilic aromatic substitution reaction.

****

QP Code : ..... Reg No:.....

FIRST YEAR B.PHARM DEGREE EXAMINATION

(Model Question Paper -2012 Scheme)

Human Anatomy and Physiology

Time : 3 hours **Max Marks : 100**

- **Answer all questions**
- **Write equations wherever necessary**

Essay: **(3x10=30)**

1. Describe the outflow and functions of autonomic nervous system with reference to its sympathetic division.
2. Describe the structure of cell with and its components with their functions.
3. Explain the histology of nervous tissue with the help of a neat labeled diagram.

Short Notes: **(14x5=70)**

4. Draw a neat labeled diagram of normal ECG. Correlate the ECG waves with atrial and ventricular systole.
5. Describe the metabolic , antiinflammatory and immune functions of glucocorticosteroids.
6. Summerize the functions of medulla oblongata.
7. Describe the bones of upper limb.
8. Briefly describe the structure and functions of respiratory system.
9. Define and explain vital capacity and anoxia.
10. Describe the process of spermatogenesis.
11. Describe the digestion and absorption in small intestine.
12. Discuss the mechanism of blood coagulation.
13. Describe briefly the mechanism of micturition.
14. Explain the physiology of menstruation.
15. Explain the physiology of hearing.
16. Discuss the anatomy and physiological functions of liver.
17. What are the types of leucocytes and their function.

****

QP Code : ..... Reg No:.....

FIRST YEAR B.PHARM DEGREE EXAMINATION

(Model Question Paper -2012 Scheme)

Pharmacognosy- I

Time : 3 hours **Max Marks : 100**

- **Answer all questions**
- **Write equations wherever necessary**

Essay: **(3x10=30)**

1. Describe the various factors affecting cultivation of medicinal plants.
2. Discuss about the plant families Labiatae and Rubiaceae.
3. Narrate a pharmacognostical report on clove

Short Notes: **(14x5=70)**

4. Mention source , constituents and uses of cinnamon and podophyllum.
5. Outline the classification of volatile oils with examples.
6. Pharmaceutical aids.
7. Write the source, chemical constituents , uses and chemical tests for beeswax.
8. Define tannins and classify with examples. Add a note on Goldbeater's skin test for tannins.
9. Explain about polyploidy.
10. What are plant growth regulators. Discuss about auxins and gibberellins.
11. Animal and microbiological sources of drugs.
12. What are the methods of drying crude drugs.
13. Describe a natural fibre obtained from animal source used in Pharmacy .
14. Resin containing drug.
15. Discuss about the morphological classification of crude drugs.
16. Mention the source , method of preparation , uses and chemical tests for cod liver oil.
17. Differentiate between Cinnamon and cassia.

****

QP Code : ..... Reg No:.....

FIRST YEAR B.PHARM DEGREE EXAMINATION

(Model Question Paper -2012 Scheme)

PHARMACEUTICS I

(Dispensing and general Pharmacy)

Time : 3 hours **Max Marks : 100**

- **Answer all questions**
- **Write equations wherever necessary**

Essay: **(3x10=30)**

1. Explain the different parts of a prescription. Write a model prescription.
2. Describe the Soxhlet apparatus and explain the extraction taking place in it.
3. Define emulsion and mention about creaming and cracking. Add a note on phase inversion.

Short Notes: **(14x5=70)**

4. What are the reasons of formulating drug in a dosage form.
5. Define proof spriit. Find out the proof spirit of an elixir containing 30% v/v alcohol.
6. Discuss any five reasons for therapeutic incompatibility.
7. Define maceration. Differentiate double and triple maceration.
8. Discuss the history of Indian Pharmacopea.
9. Mandle's paint.
10. How much of a 2 % ointment should be added to 30g of a 15 % ointment to make a 5 % ointment
11. Explain the principle involved in the preparation of Liniment ofTturpentine IP.
12. Mention the types of suppository bases. Add a note on the advantages and disadvantages of each.
13. Explain the different methods of preparation of ointments.
14. Explain the ingredients , method of preparation , use and dose of strong ammonium solution IP.
15. How will you dispense powders with volatile substances and powders with potent drugs.
16. Classify different types of mixtures.
17. Mention three examples of liquid dosage forms for internal use and define them.

****