

# Syllabus

## BP108P. Pharmaceutical Analysis (Practical)

*4 Hours/Week*

### Limit Test of the following:

- Chloride.
- Sulphate.
- Iron.
- Arsenic.

### Preparation and standardization of:

- Sodium hydroxide.
- Sulphuric acid.
- Sodium thiosulphate.
- Potassium permanganate.
- Ceric ammonium sulphate.

### Assay of the following compounds along with Standardization of Titrant:

- Ammonium chloride by acid base titration.
- Ferrous sulphate by Cerimetry.
- Copper sulphate by Iodometry.
- Calcium gluconate by Complexometry.
- Hydrogen peroxide by Permanganatometry.
- Sodium benzoate by non-aqueous titration.
- Sodium Chloride by precipitation titration.

### Determination of Normality by electro-analytical methods:

- Conductometric titration of strong acid against strong base.
- Conductometric titration of strong acid and weak acid against strong base.
- Potentiometric titration of strong acid against strong base.

## **BP110P. Pharmaceutical Inorganic Chemistry (Practical)**

**4 Hours/Week**

### **Limit tests for following ions:**

- Limit test for Chlorides and Sulphates.
- Modified limit test for Chlorides and Sulphates.
- Limit test for Iron.
- Limit test for Heavy metals.
- Limit test for Lead.
- Limit test for Arsenic.

### **Identification test:**

- Magnesium hydroxide.
- Ferrous sulphate.
- Sodium bicarbonate.
- Calcium gluconate.
- Copper sulphate.

### **Test for purity:**

- Swelling power of Bentonite.
- Neutralizing capacity of aluminum hydroxide gel.
- Determination of potassium iodate and iodine in potassium Iodide.

### **Preparation of inorganic pharmaceuticals:**

- Boric acid.
- Potash alum.
- Ferrous sulphate.

## **BP109P. Pharmaceutics I (Practical)**

**3 Hours/week**

### **Syrups:**

- Syrup IP'66.
- Compound syrup of Ferrous Phosphate BPC'68.

**Elixirs:**

- Piperazine citrate elixir.
- Paracetamol paediatric elixir.

**Linctus:**

- Terpen Hydrate Linctus IP'66.
- Iodine Throat Paint (Mandl's Paint).

**Solutions:**

- Strong solution of ammonium acetate.
- Cresol with soap solution.
- Lugol's solution.

**Suspensions:**

- Calamine lotion.
- Magnesium Hydroxide mixture.
- Aluminum Hydroxide gel.

**Emulsions:**

- Turpentine Liniment.
- Liquid paraffin emulsion.

**Powders and Granules:**

- ORS powder (WHO).
- Effervescent granules.
- Dusting powder.
- Divided powders.

**Suppositories:**

- Glycero -Gelatin suppository.
- Cocoa butter suppository.
- Zinc Oxide suppository.

**Semisolids:**

- Sulphur ointment.
- Non staining-iodine ointment with methyl salicylate.
- Carbopol gel.

**Gargles and Mouthwashes:**

- Iodine gargle.
- Chlorhexidine mouthwash.

**BP107P. Human Anatomy and Physiology (Practical)**

*4 Hours/weeks*

- Study of compound microscope.
- Microscopic study of epithelial and connective tissue.
- Microscopic study of muscular and nervous tissue.
- Identification of axial bones.
- Identification of appendicular bones.
- Introduction to hemocytometry.
- Enumeration of white blood cell (WBC) count.
- Enumeration of total red blood corpuscles (RBC) count.
- Determination of bleeding time.
- Determination of clotting time.
- Estimation of haemoglobin content.
- Determination of blood group.
- Determination of erythrocyte sedimentation rate (ESR).
- Determination of heart rate and pulse rate.
- Recording of blood pressure.

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