Applied Pathology BVOCCT-301

**UNIT I**

Atherosclerosis-definition, risk factors, pathogenesis, morphology and complications, Ischemic heart disease: Myocardial infarction- definition, pathogenesis, morphology and complications, Hypertension- Benign and malignant hypertension: pathogenesis, pathology and complications

**UNIT II**

Heart failure-Right and left heart failure: causes, pathophysiology and morphology, Rheumatic heart disease and infectious endocarditis- definition, etiopathogenesis, morphology and complications, Congenital heart disease- Types and atrial septal defect; aneurysms- types and morphology; cardiomyopathies in brief.

**UNIT III**

Atelectasis - types, Adult respiratory distress syndrome - causes , pathogenesis and morphology; pulmonary edema- classification, causes and morphology, Chronic obstructive pulmonary disease- Chronic bronchitis, emphysema, asthma, bronchiectasis: Definition, etiopathogenesis and morphology, Restrictive pulmonary diseases- Definition, categories, pathogenesis and morphology

**UNIT IV**

Pneumoconiosis-types, asbestosis, coal workers pneumoconiosis-etiopathogenesis and morphology, Pulmonary embolism, infarction, pulmonary hypertension-Definition, etiopathogenesis and morphology, Pneumonia-Classification of pneumonias; Lobar pneumonia and bronchopneumonia - etiology, pathology and complications

**UNIT V**

Clinical manifestations of renal diseases, Glomerular lesions in systemic diseases- diabetes, amyloidosis and systemic lupus erythematosus, Pericardial and pleural effusions- causes and microscopy.

**Practicals:**

1. Urine examination: physical, chemical, microscopy

2. Blood grouping &amp; Rh typing

3. Hemoglobin estimation, packed cell volume (PCV), erythrocyte sedimentation rate (ESR)

4. Charts

5. Specimens

\* Atherosclerosis

\* Pneumonia

\* Tuberculosis

\* Infarct - lung

\* Contracted kidney

\* Hydronephrosis

**Reference Books (latest edition)**

1. Basic Pathology Robbins Saunders an imprint of Elsevier Inc., Philadelphia, USA

2. Text book of Pathology Harsh Mohan Jaypee Brothers, New Delhi

3. Practical Pathology P. Chakraborty, Gargi Chakraborty New Central Book Agency, Kolkata

4. Text Book of Haematology Dr. Tejinder Singh Arya Publications, Sirmour (H.P)

5. Text Book of Medical Laboratory Technology Praful Godkar, Bhalani Publication House, Mumbai

6. Text Book of Medical Laboratory Technology RamanikSood Practical Haematology Sir John Dacie Churchill Livingstone, London