Applied Anatomy & Physiology BVOCOT-303

**UNIT-1**

Respiratory system: a)Structure and function of the respiratory tract in relation to respiratory system: Nose - Role in humidification, Pharynx - Obstruction in airways, Larynx - Movement or Vocal cords, cord palsies, trachea & Bronchial tree - vessels, nerve supply, respiratory tract, reflexes, bronchosparm, alveoli - Layers, Surfactants b)Respiratory Physiology- control or breathing, respiratory muscles- diaphragm, intercostals, lung volumes - dead space, vital capacity, FRC etc, pleural cavity - intrapleural pressure, pneumothorax, work of breathing - airway resistance, compliance, respiratory movements under anesthesia, tracheal tug - signs, hiccup. c) Pulmonary Gas Exchange And Acid Base Status, pulmonary circulation, pulmonary

edema, pulmonary hypertension, pulmonary function test transfer of gases - oxygen & Carbon dioxide, acid base status, definitions, acidosis types, Alkalosis types, buffers in the body. d)Oxygen: prop0erties, storage, supply, hypoxia, e) Respiratory failure, type, clinical features, causes.

**UNIT-2**

Cardiovascular system: Anatomy- Chambers of the heart, major vasculature, Coronary supply, innervation, conduction system, cardiac output - determinants, heart rate, preload, after load, coronary blood flow& myocardial oxygen supply, ECG- Arrhythmias cardiovascular response to anaesthetic & surgical procedures, hypotension - causes, erects, management cardio pulmonary resuscitation, myocardial infarction, hypertension.

**UNIT-3**

Fluid and electrolytes: body fluids- composition, water, sodium and potassium balance, IV fluids- composition and administration, IV cannulation, blood transfusion- blood grouping, storage, administration