



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD (now MoE)

Re-accredited with 'A++' Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Examination – May 2025

VI Semester

Class : III UG
Major : Physiotherapy

Time: 3 Hours
Max. Marks: 100

22BPTC31 Clinical Cardio Respiratory Diseases

Course outcome:

On the successful completion of the course, students will be able to

- CO1: Knowledge about the cardiac conditions pathology like infectious diseases ischemic diseases
- CO2: Learn the Lung infections and diseases its pathology are clearly studied
- CO3: Understand the Cardio pulmonary resuscitation, uses of defibrillators
- CO4: Know the Chest deformities and spinal deformities
- CO5: Knowledge about the movements and muscles responsible for respiration and thoracic cage

Part A

10 x 1 = 10

Choose the Correct Answer

1. Ventilation perfusion ratio
a. 1.8 b. 2.8 c. 3.8 d. 0.8
CO1 K1
2. Breathing increases the transverse diameter of the thorax is movement
a. Pump Handle b. Bucket Handle c. Flial chest d. Pigeon chest
CO5 K1
3. Natural pacemaker of heart
a. SA node b. AV node c. Bundle of HIS d. Purkinje fibers
CO2 K1
4. Ventricular repolarisation denoted by
a. P wave b. T wave c. QRS complex d. ST segment
CO2 K1
5. VENTRICULAR FILLING occurs during the combined activity of phases
a. Atrial diastole & ventricular systole b. Atrial systole & ventricular diastole
c. Deep Vein d. None of the above
CO2 K1
6. Pentology of fallot is a rare congenital case that refers to the presence of in addition to the classical features of Tetralogy of Fallot
a. PDA b. ASD c. VSD d. Overriding of Aorta
CO3 K1
7. The occupational lung disease caused by sugarcane dust is
a. farmers lung b. byssinosis c. pneumoconiosis d. bagassosis
CO4 K1
8. The most common cause of lung cancer
a. Cigarette smoking b. Genetics c. Cooking fumes d. Air pollution
CO5 K1
9. About 50% of patients with DVT also have which of the following conditions
a. Protein deficiency b. Occult cancer c. Occult pulmonary emboli d. Sickle cell anemia
CO5 K1
10. The following structure is typically used as a pedicle graft to the left anterior descending coronary artery during CABG
a. Left internal mammary artery b. Radial artery from non dominant arm
c. Right internal mammary artery d. Segment of the saphenous artery from one leg
CO5 K1

Part B
Answer ALL questions
Each answer should not exceed 400 words or two pages

5 x 6 = 30

- 11.a. Lung volumes and capacities. CO1 K3
(or)
11.b. Describe the neural and chemical regulation of Respiration. CO1 K3
- 12.a. Write in detail about the various Heart sounds. CO2 K3
(or)
12.b. Write in detail about the Regulation of blood pressure. CO2 K3
- 13.a. Write in detail about the Types and features of Lung Cancer. CO4 K3
(or)
13.b. Write in detail about the Types and features of occupational Lung diseases. CO4 K3
- 14.a. Describe about ventilators its modes and uses. CO5 K3
(or)
14.b. Describe about the Heart Lung Machine and its features. CO5 K3
- 15.a. Explain in detail about the ECG (Echo cardiography). CO2 K3
(or)
15.b. Explain in detail about the Various Components of Conducting System of Heart. CO2 K3

Part C
Answer ALL questions
Each answer should not exceed 800 words or four pages

5 x 12 = 60

- 16.a. Explain in detail about myocardial infarction. CO2 K4
(or)
16.b. Define Cardiac cycle. Describe the events in various phases with the help of diagrams. CO2 K4
- 17.a. Discuss in detail about the features of Acyanotic heart disease: ASD, VSD. CO3 K4
(or)
17.b. Discuss in detail about the etiology, pathogenesis, clinical features, complications, investigations and medical management of Tetralogy of Fallot. CO3 K4
- 18.a. Briefly outline the Pathogenesis of Bronchial Asthma. Discuss in detail the Management of acute Bronchial Asthma. CO4 K4
(or)
18.b. Describe in detail about the Chest wall injuries and its complications. CO4 K4
- 19.a. Explain the procedure of CABG. CO5 K4
(or)
19.b. Explain the procedure of Percutaneous Transluminal Coronary Angioplasty. CO5 K3,4
- 20.a. Explain in detail about the spinal deformities causing Respiratory complications. CO1 K3,4
(or)
20.b. Describe in detail about the normal chest wall movements during Respiration. CO1 K4
