

**BACHELOR OF PHYSIOTHERAPY
FIFTH SEMESTER
CLINICAL CARDIO RESPIRATORY CONDITIONS
BPT – 504 [REPEAT]
[USE OMR SHEET FOR OBJECTIVE PART]**

**SET
A**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

Marks: 20

Choose the correct answer from the following:

1×20=20

1. What is the most common cause of myocardial infarction?
 - a. Viral infection
 - b. High blood pressure
 - c. Blood clot in the coronary artery
 - d. Coronary artery spasm
2. Where is the cough center located in the central nervous system?
 - a. Medulla oblongata
 - b. Cerebellum
 - c. Hypothalamus
 - d. Cerebral cortex
3. Which heart rhythm is most commonly associated with cardiac arrest?
 - a. Sinus tachycardia
 - b. Atrial fibrillation
 - c. Ventricular fibrillation
 - d. Sinus bradycardia
4. What does the presence of an S4 sound often suggest?
 - a. Mitral regurgitation
 - b. Atrial fibrillation
 - c. Left ventricular hypertrophy
 - d. Heart block
5. ST-segment elevation is typically associated with which type of myocardial infarction?
 - a. Non-ST-elevation MI (NSTEMI)
 - b. ST-elevation MI (STEMI)
 - c. Subendocardial MI
 - d. Silent MI
6. What does the V/Q ratio represent in the lungs?
 - a. The ratio of blood flow to alveolar surface area
 - b. The ratio of ventilation to perfusion in the lungs
 - c. The ratio of oxygen to carbon dioxide in the blood
 - d. The ratio of hemoglobin binding to oxygen release
7. The primary symptoms of a myocardial infarction is:
 - a. Increased urination
 - b. Sudden weight loss
 - c. Severe headache
 - d. Chest pain radiating to the left arm
8. What is the primary function of alveoli in the respiratory system?
 - a. To filter dust and pathogens
 - b. To produce mucus
 - c. To exchange oxygen and carbon dioxide
 - d. To regulate the flow of air
9. Which of the following signs indicates the need for CPR?
 - a. Slow heart rate
 - b. Severe chest pain
 - c. High blood pressure
 - d. Unresponsiveness and no normal breathing

10. Which of the following best describes the function of surfactant in the lungs?
 - a. It reduces surface tension, preventing alveolar collapse
 - b. It filters particles from the air
 - c. It traps pathogens
 - d. It increases oxygen concentration
11. Which of the following lifestyle changes is recommended to help lower blood pressure?
 - a. Reducing potassium intake
 - b. Increasing salt intake
 - c. Limiting physical activity
 - d. Weight loss and regular exercise
12. In which lobe of the lung is the hilum located?
 - a. Upper lobe
 - b. Lower lobe
 - c. Middle lobe
 - d. It is located in both lungs but not in a specific lobe
13. Which of these is a known cause of dilated cardiomyopathy?
 - a. Genetic
 - b. Viral infections
 - c. Alcohol
 - d. All of the above
14. Which structures are not typically visible on a standard chest X-ray?
 - a. Heart
 - b. Lungs
 - c. Esophagus
 - d. Diaphragm
15. Which class of drugs is commonly used as a first-line treatment for hypertension?
 - a. Diuretics
 - b. Antihistamines
 - c. Antivirals
 - d. Antibiotics
16. Forced Expiratory Volume in 1 second (FEV1) is used primarily to assess:
 - a. The size of the airways
 - b. Lung elasticity
 - c. Airflow obstruction
 - d. Gas exchange efficiency
17. Which of the following is NOT a common symptom of cardiomyopathies?
 - a. Shortness of breath
 - b. Chest pain
 - c. Leg swelling
 - d. Weight loss
18. Poland syndrome is characterized by:
 - a. A defect in the sternum and associated chest muscles
 - b. A concave chest wall deformity
 - c. Underdevelopment or absence of the pectoralis major muscle
 - d. Excessive growth of rib cartilage
19. Which of the following is a characteristic feature of hypertrophic cardiomyopathy?
 - a. Thickening of the heart muscle, especially the left ventricle
 - b. Enlargement of all four chambers of the heart
 - c. Reduced ejection fraction
 - d. Accumulation of fibrous tissue in the heart muscle
20. Radiation therapy for left-sided breast cancer increases the risk of which cardiovascular complication?
 - a. Coronary artery disease
 - b. Peripheral artery disease
 - c. Aortic aneurysm
 - d. Pulmonary hypertension

(Descriptive)

Time : 2 hrs. 30 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. What is ECG? Write down the types of leads used in ECG. Draw the basic diagram of ECG. Write down the ECG interpretations of myocardial infarction. 1+3+3+
4=10
2. Define cardiac arrest. Mention it in detail with management. 10
3. Explain the mechanics of respiration in detail. 10
4. Write about STEMI and NSTEMI and their management. 10
5. A 65-year-old male presents to the clinic with a 20-year history of smoking (1 pack per day). He complains of persistent cough with sputum production, worsening shortness of breath on exertion, and fatigue. Write down the name of the diagnosed condition. Write down the definition, etiology, diagnostic tests, and treatment of the condition. 10
6. Write in detail about infective endocarditis. 10
7. Explain pulmonary and coronary circulation in detail. Write down the anatomical points of heart sounds and lung sounds. 10
8. What is pleural effusion? Write the clinical features, etiology, diagnostic tests, and treatment. 10

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