



MM-10602

Seat No. _____

Fourth Year B. Physiotherapy Examination

July - 2016

P.T. in Cardiopulmonary Conditions

(Old Course)

Time : 3 Hours]

[Total Marks : 100

- Instructions :**
- (1) Answer should be specific to the questions.
 - (2) Draw diagrams wherever it is necessary.
 - (3) Compulsory to attend section I & II.

SECTION - I

- 1 Long Essay : (any two) 10×2=20**
 - a) Explain in detail about cardiopulmonary resuscitation techniques and its therapeutic mechanism.
 - b) Describe in detail about invasive and non-invasive diagnostic procedures in cardiopulmonary diseases.
 - c) Plan out cardiac fitness program for the patient who undergone median sternotomy.

- 2 Short Essay : (any two) 5×2=10**
 - a) Types of ventilators.
 - b) Heart sounds and cardiac murmurs.
 - c) Mechanism of conduction of impulses in the heart.

- 3 Short answer : (any five) 2×5=10**
 - a) Atrial fibrillation.
 - b) Ambu-bag.
 - c) Contraindications for exercise testing.
 - d) Coarctation of aorta.
 - e) Dextrocardia and situs inversus.
 - f) The disease comes under Type 2 respiratory failure.

- 4 Multiple choice questions : 1×10=10**
 1. CPAP is defined as
 - a) Continuous pulse augmentation pressure
 - b) Continuous positive airway pressure
 - c) Continuous positive airway point
 - d) All of the above

2. Non invasive ventilatory method is define as
 - a) ventilation without an endotracheal tube or tracheostomy
 - b) ventilation with an endotracheal tube
 - c) ventilation with tracheostomy
 - d) b) and c)

3. Peripheral oedema in the respiratory patient suggests right heart failure which may be due to
 - a) Cardiac disease
 - b) Cor pulmonale
 - c) Pleural effusion
 - d) Pleurisy

4. Tachycardia is defined as a heart rate greater than
 - a) 120 beats/min at rest
 - b) 100 beats/min at rest
 - c) 80 beats per min at rest
 - d) 60 beats per min at rest

5. Angle of Louis corresponds to _____.
 - a) T4-T5 spine
 - b) T2-T3 spine
 - c) T11-T12 spine
 - d) T6-T7 spine

6. What is mean by myocardial infarction ?
 - a) Heart failure
 - b) Cardiac arrest
 - c) Heart attack
 - d) All of the above

7. Symptoms of heart attack can include-----
 - a) Dizziness, weakness, arm pain, pressure in the chest
 - b) Heart palpitations, shortness of breath, weakness
 - c) No symptoms at all
 - d) all of the above

8. What is the following statement is true about thromboembolism and atrial fibrillation ?
 - a) Stroke in atrial fibrillation are usually more serious than strokes from other causes.
 - b) The prevalence of stroke and atrial fibrillation is not age dependent.
 - c) The risk of thromboembolism in non-vascular and atrial fibrillation is different depending on the whether it is paroxysmal, persistent or permanent.
 - d) All of the above

9. The outermost layer of the heart's serous pericardium is termed the _____.
 - a) visceral pericardium
 - b) parietal pericardium
 - c) epicardium
 - d) myocardium

10. If the heart's natural pacemaker fails to fire, then _____.
- a) no blood would enter the atria and ventricle.
 - b) the person would die within minutes.
 - c) the node on the floor of the right atrium would act as a secondary pacemaker.
 - d) the node on the floor of the left ventricle would act as a secondary pacemaker.

SECTION – II

- 5 Write any **two** : **10×2=20**
- a. Discuss in detail bronchial hygiene in respiratory disease.
 - b. Discuss on postoperative physiotherapy management in lobectomy.
 - c. Causes, clinical features and physiotherapy management of pulmonary Tuberculosis.
- 6 Write short essay on any **two** : **5×2=10**
- a. Anatomy and physiology of Bronchial tree.
 - b. Types, mechanism and uses of nebulizers.
 - c. Describe chest X-ray interpretations on five respiratory diseases.
- 7 Write in short on any **five** : **5×2=10**
- a. Flutter device
 - b. Chest drainage
 - c. Glasophreangeal breathing
 - d. Incentive spirometry
 - e. MMT grade for diaphragm muscle
 - f. Adult distress respiratory syndrome.
- 8 Write all questions : **10×1=10**
- 1. Respiratory acidosis is find in below given disease.
 - a) Pneumonia
 - b) Foreign body aspiration
 - c) Any vascular anamolies
 - d) All of the above
 - 2. Find out given which one is not the pleural disease.
 - a) pneumothorax
 - b) pyothorax
 - c) heamothorax
 - d) bronchial asthma

3. Tidal volume is defined as
 - a) Maximum amount of air that can be exhaled after a normal exhalation
 - b) Amount of air inhaled or exhaled during resting ventilation
 - c) Maximum volume inhaled after a normal inspiration
 - d) All of the above
4. The normal rate of FEV1/FVC % (FEV1 divided by the FVC X100) is-----
 - a) 50-75%
 - b) 75-85%
 - c) 75-100%
 - d) 25-50%
5. 'Hoover's sign' is find in _____.
 - a) Hyperinflated patients
 - b) Hypoinflated patients
 - c) During suctioning
 - d) All of the above
6. What happens to FEV1/FEV ratio in a restrictive lung disease ?
 - a) Decrease
 - b) Increase
 - c) No change
 - d) None
7. The below given are commonly used test for exercise capacity in respiratory disease Except -
 - a) 6 minutes walk test
 - b) Treadmill test
 - c) a) and b)
 - d) agility test
8. Sinus bradycardia is a sinus rhythm -----
 - a) Above 60 beats/min
 - b) Below 60 beats/min
 - c) a) and b)
 - d) None
9. Cardiac enzyme is
 - a) alanine aminotransferase
 - b) aspartate aminotransferase
 - c) Gamma glutamyl transferase
 - d) creatine kinase
10. In restrictive lung disease[e.g. pulmonary fibrosis]-----.
 In obstructive lung disease[e.g. Asthma or COPD],
 - a) RV is increased, TLC is decreased
 - b) RV is decreased, TLC is increased
 - c) TLC is decreased, RV is increased
 - d) TLC is increased, RV is decreased