



HAV-10602

Seat No. _____

Final Year B. Physiotherapy Examination

July - 2017

Physiotherapy in Cardio – Pulmonary Conditions

Time : **3 Hours**]

[Total Marks : **100**

SECTION – I

- 1 LONG ESSAY : (ANY TWO) 2×10=20**
1. Write physiotherapy assessment and management for COPD.
 2. Discuss post operative assessment and physiotherapy management for right side pneumonaectomy.
 3. Discuss physiotherapy assessment and management for upper limb lymphoedema.
- 2 SHORT ESSAY : (ANY TWO) 2×5=10**
1. Arterial blood gas analysis
 2. Humidifier
 3. 6-minute walk test
- 3 VERY SHORT ESSAY : (ANY FIVE) 5×2=10**
1. Criteria to differentiate obstructive and restrictive lung disease by pulmonary function test
 2. Types of pneumothorax
 3. Causes of plureal effusion
 4. Flutter
 5. Incentive spirometry
 6. Cyanosis.
- 4 Multiple choice questions : (M.C.Q.) 10×1=10**
1. Which is not a complication of hyperinflation ?
 - a. pneumothorax
 - b. bronchospasm
 - c. increase cardiac output
 - d. decrease cardiac output

2. One of the following is not an x-ray finding in COPD
 - a. flail chest
 - b. flat diaphragm
 - c. elongated heart
 - d. hyperinflated lungs

3. External intercostals muscle work during
 - a. inspiration
 - b. expiration
 - c. increase vertical diameter
 - d. none of above

4. If $P_h = 7.50$, $paco_2 = 35$ mm Hg and $HCO_3^- = 30$ meq/l then there is
 - a. respiratory acidosis
 - b. metabolic acidosis
 - c. respiratory alkalosis
 - d. metabolic alkalosis

5. The maximum amount of air that can be expelled out forcefully after a maximal deep inspiration
 - a. tidal volume
 - b. vital capacity
 - c. residual volume
 - d. inspiratory reserve volume

6. Suction pressure for infant is
 - a. -80mmhg to -100mmhg
 - b. -60mmhg to -80mmhg
 - c. -100mmhg to -120mmhg
 - d. -120mmhg to -140mmhg

7. Millar's grading for
 - a. dyspnea
 - b. cough
 - c. sputum analysis
 - d. none of above

8. What is normal ventilation/perfusion ratio ?
 - a. 0.2
 - b. 0.6
 - c. 0.8
 - d. 0.10

9. In restrictive lung disease, which of the following occurs ?
 - a. increase total lung capacity
 - b. increase FEV1/FVC
 - c. increase residual volume
 - d. all of above

10. Anatomical dead space is defined as the
- pulmonary area with least blood supply
 - area occupied by the conducting airways that does not permit gas exchange
 - portion of bronchopulmonary segment that is inelastic and does not alter its size with either inspiration and expiration
 - none of above

SECTION – II

- 5 LONG ESSAY : (ANY TWO) 2×10=20**
- Physiotherapy management in ICU.
 - Discuss cardiac rehabilitation for 60 year old man with known case of myocardial infarction.
 - Discuss types of mechanical ventilator
- 6 SHORT ESSAY : (ANY TWO) 2×5=10**
- CPR
 - Coarctation of aorta
 - Mitral stenosis
- 7 VERY SHORT ESSAY : (ANY FIVE) 5×2=10**
- Contra-indication of postural drainage
 - Complication of ventilator
 - prosthetic valves
 - burger's disease
 - cardiac cycle
 - deep vein thrombosis
- 8 Multiple choice questions : (MCQ) 10×1=10**
- Acrocynosis is
 - cyanosis of hands and feet
 - Cyanosis of tongue
 - all of above
 - Both (a) and (b)

2. BOOT shape heart is seen in
 - a. ASD
 - b. VSD
 - c. TOF
 - d. all of above

3. The term cardiac output refer to the amount of blood pumped by the heart
 - a. during 24 hour period
 - b. relative to body mass
 - c. during 1 minute
 - d. during one hour

4. Homan's sign is seen in.....
 - a. varicose vein
 - b. deep vein thrombosis
 - c. DVT
 - d. lymphoedema

5. SUZZMEN'S SIGN is seen in
 - a. TOF
 - b. COA
 - c. ASD
 - d. VSD

6. ECG changes seen in myocardiac ischemia is
 - a. ST elevation
 - b. ST depression
 - c. all of above
 - d. none of above

7. The ratio of cardiac compression to breath during double operator CPR is
 - a. 15:2
 - b. 5:1
 - c. 15:1
 - d. 10:2

8. Sclerotherapy is used for
 - a. varicose vein
 - b. burger's disease
 - c. DVT
 - d. none of above

9. Machinery murmur or Gibson's murmur is heard in
 - a. COA
 - b. Aortic stenosis
 - c. mitral stenosis
 - d. PDA

10. cardiac tamponade is defined as
 - a. fluid in pleural cavity
 - b. blood in pleural cavity
 - c. fluid in pericardium
 - d. none of above