

**SARDAR PATEL UNIVERSITY**

**FINAL YEAR B.P.T. EXAMINATION**

**Monday, 06<sup>th</sup> January 2014**

**Time: 10.30 AM to 1.30 PM**

**Subject: Physiotherapy in Cardiopulmonary  
Conditions**

Candidate Seat No:  
Candidate Signature:  
Supervisor Signature:

**Total Marks: 80**

**SECTION I (MCQ's)**

**20 marks**

**Instructions:**

1. Encircle the most appropriate answer
2. No negative marking
3. Each question carry one mark

1. Tetralogy of fallot includes

- |                                      |   |
|--------------------------------------|---|
| a) VSD, ASD, PS and RVS              | b) VSD, PS, LVH, Coarctation of aorta   |
| c) VSD, PS, RVH, Overriding of aorta | d) PS, AS and Biventricular hypertrophy |

2. In ECG Atrial Depolarization is represented by:

- |           |                |           |               |
|-----------|----------------|-----------|---------------|
| a) P wave | b) QRS complex | c) Q wave | d) ST segment |
|-----------|----------------|-----------|---------------|

3. In mechanical ventilation, the following is known as weaning mode

- |                                  |         |
|----------------------------------|---------|
| a) Assist control                | b) SIMV |
| c) Control mandatory ventilation | d) CPAP |

4. Cardiac output is equal to

- |             |             |            |             |
|-------------|-------------|------------|-------------|
| a) HR x SBP | b) SV x SBP | c) HR x SV | d) SV x DBP |
|-------------|-------------|------------|-------------|

5. What can be the cause for pedal edema?

- |                    |                     |
|--------------------|---------------------|
| a) Hypoproteinemia | b) Rt heart failure |
| c) Both of above   | d) None of above    |

6. One of the major determinant of prognosis for the patient with CAD is

- |   |                          |
|---|--------------------------|
| a) Degree of left ventricular dysfunction | b) Dietary habits        |
| c) Gender of the patient                  | d) Weight of the patient |

7. Cherry red facial colour indicates the possibility of:

- |                              |  |
|------------------------------|--|
| a) Severe distress           | b) Severe arterial O <sub>2</sub> desaturation |
| c) Carbon monoxide poisoning | d) Severe dyspnea                              |

8. In case of unilateral Phrenic nerve palsy, with deep inspiration the paralyzed half of the diaphragm is:

- |                             |                               |
|-----------------------------|-------------------------------|
| a) Pulled up in the thorax  | b) Pushed down in the thorax  |
| c) Pulled up in the abdomen | d) Pushed down in the abdomen |

9. Hyperinflation of lung in COPD characterized by:

- a) Narrowing of rib angle
- b) Flattening of diaphragm
- c) Blunting of costophrenic angle
- d) Shifting of trachea to one side

10. Absolute contraindication to exercise testing is:

- a) Resting SBP > 200 mm Hg
- b) Resting DBP > 120 mm Hg
- c) Moderately severe valvular heart disease
- d) Recent complicated myocardial infarction

11. A 50 years old male patient with coronary artery disease having Resting heart rate 60 bpm, advised by physiotherapist to undergo exercise program at 60% Heart rate reserve. His target heart rate would be:

- a) 104
- b) 126
- c) 155
- d) 162

12. The rate pressure product is linearly correlated with

- a) Pacing of the heart
- b) Myocardial O<sub>2</sub> demand
- c) Cardiac diastole
- d) None of the above

13. The purpose of inspiratory hold with incentive spirometer is to

- a) Prevent early closure of alveoli
- b) Increase intrathoracic pressure
- c) Increase FRC
- d) Increase collateral ventilation

14. The potential outcome of pursed lip breathing is

- a) An increase in arterial CO<sub>2</sub> tension
- b) An increase in arterial O<sub>2</sub> tension
- c) An increase in respiratory rate
- d) An increase in minute ventilation

15. The lung compliance increases in

- a) Asthma
- b) Emphysema
- c) Bronchiectasis
- d) Lung collapse

16. Identify the position in which the arterial oxygen tension increases in bilateral lung disease

- a) Prone
- b) Supine
- c) Lateral
- d) Semi reclined

17. Foul smelling, copious, layered purulent sputum is predominantly suggestive of

- a) Broncho pneumonia
- b) Bronchitis
- c) Bronchiectasis
- d) Neoplastic lung disease

18. The maximum volume of gas that can expelled from the lungs after a maximal inspiration is termed as

- a) Total lung capacity
- b) Expiratory residual capacity
- c) Vital capacity
- d) Tidal volume

19. Mediastinal shift to the contra lateral side is associated with:

- a) Atelectasis
- b) Pleural effusion
- c) Lobectomy
- d) Pneumonectomy

20. The chest wall with depressed sternum is referred to as:

- a) Pigeon chest
- b) Pectus excavatum
- c) Harrison sulcus
- d) Pectus carinatum