

Registration No:

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Total Number of Pages: 01

Course: MPT

SUBJECT NAME: PT in speciality area (Cardio Pulmonary Disorder)

SUB_CODE: 23MPT1C1

(1st Year MPT) Examination: Regular 2024-25 & Supplementary 2023-24 (Admitted Batch)

BRANCH: Allied Science MPT

Q. CODE: A340

Max Time: 3 Hours

Max Marks: 80

Sitting: 1st, 10.00 AM to 1.00 PM

Any Question having parts should be answered as whole at one place only.

Illustrate answer with diagrams wherever relevant / required if any)

Long Answer questions (any four out of six)

Q 1 Draw illustrated diagrams (surface marking) of anterior and posterior views of both lungs, including the position of fissures and broncho-pulmonary segments. (1 x 15 Marks)

Q 2 Draw an illustrated diagram of cardiac cycle demonstrating various pressures, opening and closing of heart valves, heart sounds and ECG waveforms. Discuss the effect of tachycardia on various phases of cardiac cycle. (1 x 15 Marks)

Q 3 Describe the role of gravity on lungs ventilation, perfusion and gaseous exchange. (1 x 15 Marks)

Q 4 What are the various stages of hypertension? Explain pathophysiology of ventricular diastolic dysfunction in hypertension. (1 x 15 Marks)

Q 5 Draw an illustrated diagram of skin. How the skin maintains the homeostasis in human? (1 x 15 Marks)

Q 6 Define chronic obstructive pulmonary disease (COPD). What are the causes of COPD? Explain pathophysiology of COPD. (1 x 15 Marks)

Q 7 Short answer questions (any five out of eight) (5 x 4 Marks)

- a) Type I respiratory failure- Causes and ABG values
- b) Work of breathing- its parameter and mathematical equation.
- c) Cardiovascular effects of acute resistance exercise
- d) Endurance training in Type II Diabetes mellitus
- e) Effect of pollution on exercise training
- f) Fick's equation
- g) Acute coronary syndrome- causes and pathophysiology
- h) Effects of aging on cardiovascular system
