M.D. DEGREE EXAMINATION
BRANCH V – PHYSIOLOGY

PAPER II – CIRCULATION, RESPIRATION, ENVIRONMENTAL PHYSIOLOGY, COMPARATIVE PHYSIOLOGY AND EXCRETION

Q.P. Code :202019

Time : Three Hours   **Maximum : 100 marks**

I. Essay: **(2 x 10 = 20)**

1. Explain the properties of Cardiac muscle fibre.
2. Mention the pulmonary function tests useful in assessing the diagnosis and prognosis of a lung disease.

II. Short Questions: **(8 x 5 = 40)**

1. Autoregulation of blood flow.
2. Traube Hering waves.
3. Radionucleotide Scanning in evaluating cardiac function.
4. What are the factors influencing stability of alveoli?
5. Write a note on Tamm Horsfall proteins.
6. Stop flow Technique.
7. Respiratory responses to Exercise.
8. Write a note on Asphyxia.

III. Reasoning Out: **(4 x 5 = 20)**

1. Persistent cough decreases venous return to heart.
2. Breathing pure oxygen at high pressure leads to failure of buffer system in the body.
3. Thin walled, delicate capillaries are less prone to rupture.
4. Proximal Convoluted Tubules have a high rate of oxygen consumption.

IV. Very Short Questions: **(10 x 2 = 20)**

1. What is Cushing's Reflex?
2. What is Fick's principle?
3. What do you mean by Cytopemphis?
4. What do you mean by Diffusion Capacity of Lung?
5. What is Alkaline Reserve?
6. Define Plasma Clearance.
7. Malignant Hyperthermia.
8. Define Cardiac Cycle.
9. Obligatory reabsorption of water.
10. Starlings forces

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