M.D. DEGREE EXAMINATION BRANCH V – PHYSIOLOGY

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

Q.P. Code :202019

Time: Three Hours

I. Essay:

Maximum: 100 Marks
(2 x 10 = 20)

- 1. Write an essay on Mechanics of Breathing. Add a note on Respiratory Distress syndrome.
- 2. Describe in detail the various events along with the pressure volume changes during a cardiac cycle.

II. Short Questions: $(8 \times 5 = 40)$

- 1. Carbondioxide transport in the blood.
- 2. Sleep Apnea.
- 3. Cardio pulmonary changes during Exercise.
- 4. Poiseuille's Law.
- 5. Venous Return.
- 6. Sino Aortic Reflex.
- 7. Renal Autoregulation.
- 8. Role of Kidney in calcium homeostasis.

III. Reasoning Out: $(4 \times 5 = 20)$

- 1. Digitalis improves cardiac contractility.
- 2. Demeclocycline, an antibiotic, is useful in treating patients with Inappropriate Hypersecretion of Vasopressin. Give Reason.
- 3. Baroreceptors usually do not contribute for the Long term Regulation of Blood Pressure.
- 4. Salt restriction and diuretics are recommended in Hypertension.

IV. Very Short Questions:

 $(10 \times 2 = 20)$

- 1. Timed Vital Capacity.
- 2. Hering Breuer Reflex.
- 3. Vagal Tone.
- 4. Vasomotor waves.
- 5. Factors influencing the Lymph flow.
- 6. Obligatory Urine Volume.
- 7. Limiting PH.
- 8. Renal Threshold for Glucose.
- 9. Orthostatic albuminuria.
- 10. Renal or Goldblatt Hypertension.
