

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 Questions:

(2 x 15 = 30)

1. Describe in detail the role of kidney in acid base balance. Add a note on anion gap.
2. Physiological effects of deep sea diving. Add a note on carbon-dioxide toxicity.

II. Short notes:

(10 x 5 = 50)

1. Natriuretic peptides.
2. Integrated response to haemorrhage.
3. Structures of microcirculation.
4. Cardiac and vascular function curves.
5. Short term regulation of blood pressure.
6. The cardio pulmonary changes during exercise.
7. Flow volume curves.
8. Measurement of functional residual capacity of the lungs.
9. Oxygen transport.
10. The effects of zero gravity.

III. Reasoning Out:

(4 x 5 = 20)

1. Proximal convoluted tubules have a high rate of oxygen consumption.
2. Bradycardia in athletes is physiological.
3. When ventilation perfusion ratio becomes infinite?
4. Ventricular fibrillation is dangerous than atrial fibrillation.
