

[LI 122]

APRIL 2016

Sub. Code: 2019

**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. Describe in detail the role of kidney in acid base balance. Add a note on postprandial alkaline tide.
2. How is heart rate regulated? What is sinus arrhythmia?

II. Short Questions:

(8 x 5 = 40)

1. Functional residual capacity.
2. Gravitational (G) forces.
3. End diastolic volume.
4. Triple response of Lewis.
5. Natriuretic peptides.
6. Acute mountain sickness.
7. Law of Laplace and its physiological applications.
8. Non respiratory functions of lungs.

III. Reasoning Out:

(4 x 5 = 20)

1. High protein intake increases Glomerular Filtration Rate.
2. The nerves from the baroreceptors are called buffer nerves.
3. Reason for AV nodal delay.
4. Peripheral oedema in cardiac failure.

IV. Very Short Questions:

(10 x 2 = 20)

1. Surfactant.
2. Phonocardiogram.
3. Atonic bladder.
4. Biot's breathing.
5. Osmotic diuresis.
6. Creatinine clearance.
7. Physiological Dead space.
8. Stokes Adams Syndrome.
9. Oxygen therapy.
10. Self contained underwater breathing apparatus (SCUBA).
