

[LS 122]

NOVEMBER 2020
(OCTOBER 2020 SESSION)

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 Questions:

(2 x 15 = 30)

1. Describe the special features and factors regulating coronary circulation. Add a note on myocardial Infarction.
2. Define a buffer. Describe the various renal buffers. What is limiting pH?

II. Short notes:

(10 x 5 = 50)

1. Triple response.
2. Measurement of cardiac output.
3. Reynold's number.
4. Goldblatt hypertension.
5. Abnormal constituents of urine.
6. Artificial kidney.
7. Thermoregulatory centres.
8. Non-respiratory functions of lung.
9. Acclimatization to low PO₂.
10. Periodic breathing.

III. Reasoning Out:

(4 x 5 = 20)

1. Increase in GFR following a high protein meal.
2. Pressure gradient in pulmonary circulation is much less than that in systemic circulation.
3. Leakage in pressurized cabin leads to embolism.
4. Bradycardia in athletes.
