U.G. 6th Semester Examination-2021 PHYSIOLOGY

[HONOURS]

Course Code: PHYSIOL-H-CC-T-14 (Formation & Excretion of Urine)

Full Marks : 40 Time : $2\frac{1}{2}$ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

- 1. Answer any **five** questions:
 - a) Define glomerular filtration rate (GFR).
 - b) What is diuretics? Give one example.
 - c) What is aquaporin? State its physiological importance.
 - d) State the functions of macula densa.
 - e) State the importance of Juxta-glomerular apparatus.
 - f) Mention the abnormal constituents of urine in adult human.
 - g) Name the hormones produced by the Kidney.

a) Discuss the role of Kidney in the regulation of acid base balance in the body.

Answer any **two** questions:

- b) Describe the auto regulation of renal circulation.
- c) What is the counter-current mechanism in urine formation?
- d) Discuss briefly the peculiarities in renal circulation.
- 3. Answer any **two** questions: $10 \times 2 = 20$
 - a) Discuss the mechanism of urine formation in human.
 - b) Describe the innervations of urinary bladder.Describe the process of micturition. 4+6
 - c) State the source of renin. Describe the role of renin angiotensin system in the regulation of blood pressure. 2+8
 - d) Describe non-excretory functions of Kidney.
 10

 $2 \times 5 = 10$

2.