691/Phy. 22-23/62512

B.Sc. Semester-VI Examination, 2022-23 PHYSIOLOGY [Honours]

Course ID: 62512 Course Code: SH/PHY/602/C-14(T)

Course Title: Formation and Excretion of Urine

Time: 1 Hour 15 Minutes Full Marks: 25

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 from the following:

 $1 \times 5 = 5$

- a) Define obligatory water reabsorption.
- b) What is renal stone?
- c) What is 'Cystometrogram'?
- d) Define diuretics with one example.
- e) Name any two abnormal constituents of urine.
- f) Write any one difference between cortical and juxta medullary nephron.
- g) Mention any two functions of mesengial cell.
- h) Define TmG.

2. Answer any **two** questions from the following:

 $5 \times 2 = 10$

- a) Describe in brief the innervation pattern of urinary bladder.5
- b) Mention the peculiarities of renal circulation.

5

- c) What is GFR? Briefly discuss about the role of different factors affecting GFR. 1+4
- d) Describe in brief the role of kidney in regulation of acid-base balance of blood. 5
- 3. Answer any **one** question from the following:

 $10 \times 1 = 10$

- a) Write about artificial kidney with its importance. State the myogenic theory of renal blood flow. 6+4
- b) Write in brief about 'Renin-Angiotensin' system. Briefly discuss how kidney forms hypertonic urine. 4+6
