

U.G. 6th Semester Examination-2022**PHYSIOLOGY****[HONOURS]****Course Code : PHYSIOL-H-CC-T-14****(Formation & Excretion of Urine)**

Full Marks : 40

Time : 2½ 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: 2×5=10

- a) What is renal pelvis?
- b) What is polyuria?
- c) Define hematuria.
- d) What is GFR?
- e) State the functions of podocytes.
- f) What is meant by renal shut down?
- g) What are diuretics? Give an example.

2. Answer any **two** questions: 5×2=10

- a) Discuss the structure of Malpighian corpuscle with a suitable diagram. 5

[Turn Over]

- b) What do you mean by renal threshold of glucose? Discuss about the abnormal constituents of urine. 1+4=5

- c) Discuss the process of micturition. 5

- d) Discuss the mechanism of Na⁺ reabsorption in Proximal convoluted tubule (PCT). 5

3. Answer any **two** questions: 10×2=20

- a) What is filtration fraction? Discuss the role of different parts of renal tubule in urine formation. 2+8=10

- b) Discuss about different non-excretory functions of kidney. 10

- c) What is Juxtaglomerular apparatus? Discuss the physiological role of renin angiotensin system (RAS) regulation of blood pressure. 2+8=10

- d) What is hemodialysis? Discuss the role of kidney in regulation of acid-base balance. 2+8=10
