

**B.Sc. 1st Semester (Honours) Examination, 2022-23**

**PHYSIOLOGY**

**Course ID : 12511 Course Code : SH/PHY/101/C-1**

**Course Title : Cellular Basis of Physiology (New)**

*Time : 1 Hour 15 Minutes*

*Full Marks : 25*

*The figures in the right hand margin indicate full marks.*

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

**Unit-I**

**1. Answer *any five* questions : 1×5=5**

(a) What do you mean by check-point of cell cycle?

(b) What do you mean by F<sub>1</sub> particle?

(c) Define apoptosis.

(d) Define intercalated disc.

- (e) Write any one function of synovial fluid.
- (f) What do you mean by cyto-ribosome?
- (g) What is 'Haversian system'?
- (h) What is peroxisome?

### Unit-II

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

- (a) Briefly discuss about the composition and function of CSF. 3+2
- (b) Define homeostasis. Briefly mention the feedback mechanism of homeostasis in general with one example. 1+4
- (c) What is unit membrane? Discuss the significance of fluid-mosaic model of cell membrane. 1+4
- (d) Classify tissue. Mention in brief about adipose tissue. 2+3

### Unit-III

3. Answer **any one** question : 10×1=10

- (a) Describe the electron microscopic structure of nucleus with suitable diagram. Mention in brief the functions of endoplasmic reticulum. (5+2)+3
- (b) What is carrier mediated transport? Describe the mechanism of active transport with example. 2+8