SH-I/PHY/101/C-1/19

B.Sc. 1st Semester (Honours) Examination, 2019 PHYSIOLOGY

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

Course Title: Cellular Basis of Physiology

Time: 1 Hour 15 Minutes Full Marks: 25

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words

as far as practicable.

The questions are of equal value.

1. Answer *any five* questions:

 $1 \times 5 = 5$

- (a) Write the function of desmosome.
- (b) State the role of plasma cell.
- (c) Write the location and function of syncytium.
- (d) What do you mean by carrier mediated transport?
- (e) Mention the role of rough surfaced endoplasmic reticulum.
- (f) What is Farnandez-Moran subunit?
- (g) Write the name of the chemical that arrest cell division.
- (h) State the characteristics of connective tissue.

2. Answer *any two* questions:

 $5 \times 2 = 10$

(a) What is synovial fluid? Write the composition of synovial fluid.

- 1+4=5
- (b) Define tight junction. Briefly describe the structure and function of gap junction. 1+(2+2)=5
- (c) Differentiate between apocrine and holocrine glands. Define antiport.

3+2=5

(d) Classify different types of connective tissue with example. Name one secretory epithelial cell.

4+1=5

3. Answer *any one* question:

 $10 \times 1 = 10$

- (a) (i) What is cell cycle? Discuss the different phages of cell cycle.
 - (ii) Write the significance of chiasma formation.

(2+6)+2=10

- (b) (i) Mention the composition and function of CSF.
 - (ii) Briefly discuss the process of symport across the cell membrane with a suitable example. (3+2)+(4+1)=10

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