

B.Sc. 1st Semester (Honours) Examination, 2020-21

PHYSIOLOGY

Course ID: 12511

Course Code: SH/PHY/101/C-1(T)

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.

1. Answer any five questions from the following:

1×5=5

- (a) Mention any two functions of synovial fluid.
- (b) Why lysosome is known as suicidal bag?
- (c) Differentiate between compact bone and spongy bone (one difference).
- (d) Mention the function of intercalated disc.
- f) Define meiosis.
- (f) Differentiate between active and passive transport.
- (g) Name one glandular cell with its function.
- (h) What is goblet cell?

2. Answer any two questions from the following:

5×2=10

- (a) Differentiate between symport and uniport. Describe symport with proper example.
3+2 =5
- (b) What is CSF? Briefly discuss about the composition and function of CSF.
1+2+2 =5
- (c) Why blood is considered as connective tissue? Mention the properties of connective tissue.
2+3= 5
- (d) Briefly mention the physiology of ageing. What is gerontology?
4+1=5

3. Answer any one question from the following:

10×1=10

- (a) Describe the electron microscopic structure of mitochondria. Mention the name of plasma proteins of blood and state their important functions.
5+ 2+3 =10
- (b) What are the check points of cell cycle? Briefly discuss the 1st prophase of meiotic cell division. Write the significance of meiosis.
2+5+3=10