

**B.Sc. 5<sup>th</sup> Semester (Programme) Examination, 2020-21**

**PHYSIOLOGY**

**Course ID: 52518**

**Course Code: SP/PHY/501/DSE-1A (T)**

**Course Title: Clinical Microbiology and Immunology**

**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) What is adjuvant?
- (b) What do you mean by non-pathogenic bacteria?
- (c) Define lymphokine. What do you mean by acid fast bacteria?
- (d) What is auto immunity?
- (e) Give an example of cocci and bacilli bacteria?
- (f) How does avidity differ from affinity?
- (g) What is prion?
- (h) What is immunization?

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

**5×2=10**

- (a) Discuss the importance of antibody in our body system. What is monoclonal antibody?  
3+2=5
- (b) Define sterilization. Mention the importance of pasteurization  
1+4=5
- (c) What is ELISA? Mention the application of ELISA.  
1+4=5
- (d) Explain the characteristics of bacterial growth curve with a diagram.  
3+2=5

**3. Answer any one from the following questions:**

**10×1=10**

- (a) Briefly describe the structure of immunoglobulin with suitable diagram. Differentiate between B and T lymphocyte. What is memory cell?  
5+3+2=10
- (b) Briefly describe the structure of bacteriophage. Differentiate between gram positive and gram-negative bacteria.  
4+6= 10