

**B.Sc. 1st Semester (Honours) Examination, 2019-20**

**BOTANY**

**Course ID : 11311**

**Course Code : SHBOT-101C-1**

**Course Title: Phycology and Microbiology**

**Time: 2 Hours**

**Full Marks: 25**

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

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

1. Answer *any five* of the following: 1×5=5
- (a) What is coenobium?
  - (b) Name one antibiotic producing bacteria.
  - (c) Define vaccine.
  - (d) Define Akinete.
  - (e) What are viroids?
  - (f) What do you mean by Synzoospore?
  - (g) What do you mean by Spheroplasts?
  - (h) What is auxospore?
2. Answer *any two* of the following: 5×2=10
- (a) Classify virus according to Bultimore. 5
  - (b) Briefly discuss regarding the economic importance of Bacteria in Agriculture and fermentation. 2½+2½=5
  - (c) What are the main pigments of Phaeophyta? Draw the life cycle of *Ectocarpus*. What is physiological anisogamy? 1+3+1=5
  - (d) What is Chrysolaminarin? Describe the sexual cycle of *Vaucheria*. 1+4=5
3. Answer *any one* of the following: 10×1=10
- (a) Distinguish Macrandrous species of *Oedogonium* from Nannandrous species. Describe the sexual cycle of *Chlamydomonas*. 2+8=10
  - (b) What is Prophage? Describe the steps of Lytic cycle of a mature Virion with suitable diagram. 2+6+2=10
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