



SM – 401

II Semester B.Sc. Examination, May/June 2018  
(Semester Scheme) (F + R)  
(CBCS – 2014-15 and Onwards/NS 2011-12 and Onwards)  
**MICROBIOLOGY – II**  
**Microbial Taxonomy and Culture Techniques**

Time : 3 Hours

Max. Marks : 70

- Instructions :** 1) Answer *all* Sections.  
2) Draw diagrams *wherever* necessary.

**SECTION – A**

I. Answer the following :

(5×2=10)

- 1) Chemostat.
- 2) Lambda phage.
- 3) Agaricus.
- 4) Selective media.
- 5) Archaeobacteria.

**SECTION – B**

II. Answer **any four** of the following :

(4×5=20)

- 6) Write a note on classification of viruses.
- 7) Explain the structure and asexual reproduction in Fusarium.
- 8) Describe the structure and reproduction in Anabaena.
- 9) Explain synchronous culture and its importance.
- 10) Describe streak plate technique, its types and significance.

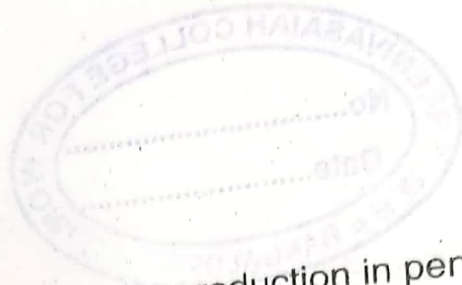
**SECTION – C**

III. Answer **any three** of the following :

(3×10=30)

- 11) Explain in brief the ultrastructure of a bacterial cell.
- 12) Describe the structure and reproduction of HIV.

P.T.O.



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- 13) Describe the structure and reproduction in penicillium.
- 14) Explain the steps involved in isolation of micro-organisms.
- 15) Classify micro-organisms based on the various mode of nutrition.

SECTION - D

(10x1=10)

IV. Answer the following in **one** sentence.

- 16) Q fever.
- 17) Psychrophile.
- 18) Nutrient broth.
- 19) Ray fungi.
- 20) Zoospores.
- 21) Paramoecium.
- 22) Microaerophilic.
- 23) Cyanophage.
- 24) Budding.
- 25) PPLO.

SECTION - B