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UG/1st Sem/MICRO(H)/T/19

2019

B.Sc.

1st Semester Examination

MICROBIOLOGY (Honours)

Paper - C 2-T

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

1. Answer any *five* questions of the following :

2×5=10

- (a) Mention the function of cilia and fimbriae.
- (b) What is LPS ?
- (c) Differentiate between streak plate and pour plate technique.
- (d) What is negative staining ?

[Turn Over]

- (e) What is differential media ? Cite one example.
- (f) What do you mean by asexual method of reproduction of bacteria ?
- (g) What is strain ?
- (h) Define halophiles with example.

2. Answer any *four* questions : 4×5

(a) Describe the stages of sporulation in bacteria.
What is L-form bacteria ? 4+1

(b) State the principle of fluorescence microscopy.
What is resolving power of microscope ? 4+1

(c) Describe the typical growth curve of bacteria.
What is generation time ? 4+1

(d) Explain one molecular approach for bacterial taxonomy analysis. What is mycoplasma ? 4+1

(e) Differentiate eubacteria and archaebacteria.
Write the mode of action of UV-ray on bacterial physiology. 3+2

(f) Write short note on :

(i) Capsule and its role

(ii) Conjugation and its importance 2.5×2

3. Answer any *one* question : 1×10

(a) What is plasmid ? Classify it. Write the ultrastructure of bacterial flagella. Mention two important methods of microbial preservation.

1+2+5+2

(b) What is disinfectant ? Cite two example. Explain the principle of steam-under-pressure based sterilization. Write are the salient features of cyanobacteria.

2+1+4+3
