

S.Y.B.SC. SEM – IV (2014 Course) : SUMMER - 2019
SUBJECT: MICROBIOLOGY: APPLIED MICROBIOLOGY (MB-42)

Day: Saturday
Date: 13/04/2019

Time: 03.00 PM TO 05.00 PM
Max. Marks: 40

S-2019-0982

N.B:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat labeled diagrams **WHEREVER** necessary.
-

Q.1 Attempt **ANY TWO** of the following: **(10)**

- a) What is MPN test? Give its importance in the enumeration of coliform bacteria.
- b) With the help of a flow sheet explain streptomycin fermentation.
- c) Give the use of antifoam agents in fermentation media.

Q.2 Attempt **ANY TWO** of the following: **(10)**

- a) Differentiate between Black strap molasses and High test molasses.
- b) Differentiate between activated sludge process and sludge digestion.
- c) Draw a neat labelled diagram of a septic tank.

Q.3 Attempt **ANY TWO** of the following: **(10)**

- a) How is water purified by the rapid sand filtration method? Is further disinfection essential? Why?
- b) With a suitable diagram describe different parts of a typical fermenter.
- c) Give the importance of primary and secondary screening in a fermentation process.

Q.4 Write in short on /Explain/Define/Enlist **ANY FIVE** of the following: **(10)**

- a) Crowded plate technique
- b) Multiple fermentations
- c) Primary treatment
- d) Disinfection of water by ozone
- e) Precursors in penicillin fermentation
- f) Corn steep liquor
- g) Waterborne protozoal diseases

* * * * *
