

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE -27
MID SEMESTER TEST – AUGUST 2016
M.Sc. MICROBIOLOGY – III SEMESTER
MBOE: 9516- Microbes and Us

Time: 1 1/2 hours

Max. Marks: 35

I. Answer any five of the following.

5x2=10 marks

1. What are Lichens?
2. Define- i) BOD ii) Population
3. List the operational types of biomining? Name any one organism used for the biomining of copper.
4. Define nosocomial and secondary infections.
5. What do you mean by healthy and chronic carrier?
6. List any four branches of Microbiology.
7. Which fermented milk product is produced by *Lactobacillus acidophilus* and *Lactococcus lactis*?

II. Answer any two of the following:

2x5=10 marks

8. Explain the physiochemical processes in tertiary treatment of wastewater.
9. Mention the advantages and disadvantages of having normal microflora.
10. Classify microorganisms based on the temperature and pH required for their growth. Give suitable ranges for each of the classes.

III. Answer any one of the following:

1x10=10 marks

11. a. Transgenic plants were believed to be a boon to the Agricultural sector, what important features of transgenic plants led to this belief?(6)
b. What is the mode of action of Cry protein? (4)
12. a. List the various sources and methods of transmission of infection. (5)
b. List the therapeutics importance of fermented milk products.

IV. Answer the following:

1x5=5 marks

13. a. The open elective in Microbiology has enhanced your interest in the subject so you decided to visit the Microbiology lab one day, the students show you a plate in which you see that a fungus is inhibiting a bacteria from growing on the plate. From your current knowledge of the subject what according to you is the reason for this. 2 M
- b. There are millions of microorganisms residing on the human body is that a good thing or bad. Give reasons for your opinion. 3 M