

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE -27  
MID SEMESTER TEST – AUGUST 2016  
M.Sc. MICROBIOLOGY – III SEMESTER  
MBDE 9316– Food Microbiology

Time: 1hr

Max Marks: 20

I. Answer any **Three** of the following

3x 2 =6

1. Expand and define PSE meat.
2. Briefly mention how discolouration is brought about in spoilt meat.
3. Define water activity.
4. What are Oxygen scavenging systems.
5. Differentiate between field and storage fungi in the spoilage of grains.

II. Answer any **Two** of the following

2x 5 = 10

6. Explain the role of Psychrotrophic bacteria in milk.
7. What are the various stages of canned food spoilage?.
8. Give two important characteristic features of Shigellosis. Explain virulence regulation in *Shigella sp.*

III. Answer the following

1x4=4

9. a. How is  $E_h$  related to pH? (2 marks)
- b. When the  $a_w$  of a food is set at 0.60, is an environment of high R.H preferred? Why? (2 marks)