

[Time: 3 Hours]

[Max. Marks: 100]

Bioprocess Technology**(RS 2 & RS 3)****Q.P. CODE: 9313**

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

LONG ESSAY (Answer any FOUR)**4 X 25 = 100 Marks**

1. Describe the effect of aeration, agitation and mass transfer in fermentation equipment. **25**
2. Discuss the rheology of fermentation systems and its importance in fermenter operation. **(12+13 = 25)**
3. Short note on
(i) Enzymatic assays (ii) Bioautographic technique (iii) Disintegration **(9 + 8 + 8=25)**
4. Explain about the overview of economics in general fermentation process **(12+13 = 25)**
5. Discuss all the aspects of Isolation and purification of fermentation and biological products. **(13+10+5 = 25)**
6. Explain the following terms **(9 + 8 + 8=25)**
 - a) Michaelis – menten constant
 - b) Effect of temperature on reaction rate
 - c) Thermal death of microorganism

* * * * *

www.FirstRanker.com