MODEL PAPER 2014
SEM II PAPER I MICROBIOLOGY

Max marks 50

1	Discuss in detail the structure of glucose OR Explain the Watson and Crick model of Structure of DNA	10
2	Explain two methods for determination of nutritional requirement OR Discuss the different physical conditions for growth	10
3		10
A	Give the biological significance of glucose	
B	Write short note on tertiary level of protein	
C	Give difference between selective and differential media	
D	Give difference between synchronous and continuous culture OR	
E	Explain the structure of Sucrose	
F	Write short note on mRNA	
G	Give the role of peptone in media	
H	Write short note on Breed's method	
4		10
A	Write short note on homopolysaccharide	
B	Give difference between purines and pyrimidines	
C	Give difference between agar and peptone	
D	Write short note on logarithmic phase of growth OR	
E	Write short note on prostaglandins	
F	Write short note on peptide bond theory	
G	Classify bacteria on the basis of carbon requirement	
H	Give the mathematical expression of growth	
5	ANSWER ANY 10	10
A	Draw the structure of Lactose	
B	Draw the structure of Raffinose	
C	What is chitin ?	
D	Draw the structure glycine	
E	Give example of hydroxyl amino acids	
F	Give function of tRNA	
G	What is the mode of reproduction in bacteria?	
H	Give one similarity between maximum stationary phase and survival phase	
I	Define generation time	
J	If the exponential growth rate constant is 2 doublings/hour, find the generation time	
K	Draw the diagram of turbidostat	
L	What are microaerophilic bacteria?	