

UNIVERSITY OF CALCUTTA

MICROBIOLOGY GENERAL

SEMESTER 3

PAPER: CC3-GE3- Practical

FULL MARKS:30

ANSWER SCRIPT SUBMISSION email ID: sem3microbiologyg@gmail.com

1. Draw a growth curve of *E.coli* by plotting O.D vs time & calculate generation time from the following data. Convert the O.D value into CFU/ml by using the following conversion factor:

1 O.D= 3×10^8 CFU/ml.

Time (minutes)	0	30	60	90	120	150	180	210	240	270	300	330
O.D	0.01	0.01	0.01	0.03	0.24	0.39	0.53	0.60	0.65	0.70	0.76	0.8

Write the result under the following headings:

- a) Principle
 - b) Procedure
 - c) Conversion of O.D into CFU/ml
 - d) Graph
 - e) Calculation of generation time. 3+2+3+7+5
2. Laboratory note book. 5
3. Viva voce 5
- a. Give an example of a thermophilic bacteria.
 - b. Give an example of an acidophilic bacteria.
 - c. Define generation time.
 - d. What is logarithmic phase of bacterial growth?
 - e. What are halophilic bacteria. Give example.