Enrollme	ent No: Exam Seat No:	
	C.U.SHAH UNIVERSITY	
	Winter Examination-2018	
Subject N	Name: Microbial Physiology and Metabolism	
Subject C	Code: 4SC03MPM1 Branch: B.Sc. (Microbiology)	
Semester	r: 3 Date: 10/12/2018 Time: 02:30 To 05:30 Marks: 70	
(2) Ir (3) D	Use of Programmable calculator & any other electronic instrument is prohibited. Instructions written on main answer book are strictly to be obeyed. Oraw neat diagrams and figures (if necessary) at right places. Assume suitable data if needed.	
	Attempt the following questions:	(14)
a)	The Pasteur effect is an inhibiting effect of oxygen on the fermentation process.	
u)	True/False	
b)	Chemolithotrophic bacteria obtain energy from the oxidation of inorganic	
,	compounds. True/False	
c)	Expand ETC.	
d)	Diauxic growth is caused by the presence of sugars on a culture growth media. (one/two/three)	
e)	What are methanogens?	
f)	The process of synthesis of complex molecules in living organisms from simpler ones is called(catabolism/anabolism/metabolism).	
g)	Diauxic growth is characterized by cellular growth in one phase. True/False	
h)	Expand BGA.	
i)	What are thermoduric bacteria?	
j)	In bacteria, the electron transport chain is located in the cell membrane of mitochondria. True/False	
k)	A facultative anaerobe is an organism that makes ATP by aerobic respiration in	
K)	presence of oxygen, but is capable of switching to fermentation if oxygen is	
	absent. True/False	
1)	What are xerophiles?	
m)	Denitrification is a microbially facilitated process where nitrate is reduced to nitrogen. True/False	
n)	Purple photosynthetic bacteria are proteobacteria. True/False	

Attempt any four questions from Q-2 to Q-8

Q-2	Attempt all	questions
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Q-1

- a) What is fermentation? Briefly explain the importance of it.b) Explain the main steps of glycolysis. (7) (7)
- Q-3 Write short notes on



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