

CHOITHRAM SCHOOL MANIKBAGH INDORE

CLASS XII Session: 2017-18

Subject: Biotechnology
Allotment Date: 25/08/17

Assignment No: III
Submission Date: 01 /09/17

S.N O	QUESTION	MAR KS	LEVEL
	OBJECTIVE TYPE		
1.	What is the sterilization procedure used for media culture in laboratory?	1	KNOWLEDGE
2.	Indicate the use of 1) Antifoams 2) Corn-steep liquor	1	KNOWLEDGE
3.	Define Chemostat and Turbidostat?	1	KNOWLEDGE
4.	In large scale microbial culture media sunflower oil is additive. What purpose does this serve? To a stationary phase cell culture, a dose of hormone was added. No change in growth of cells resulted. Explain why?	2	LOGIC
5.	For small scale laboratory culturing, why is synthetic media simpler?	2	HOTS
6.	During downstream processing of proteins, it is ensured that a. pH remains constant b. minimum processing time is used and c. agitation of the solution is avoided. Suggest a reason for each.	2	UNDERSTANDING
7.	How metagenomics approach helps to identify newer/novel genes?	2	LOGIC
8.	With suitable example indicate how a microbial strain can be improved?	3	MULTICONCEPTUAL
9.	Indicate two problems which are encountered in expressing eukaryotic genes in bacteria. How can yeast cells be used to overcome these?	3	HOTS
10.	Write a note on ethical concerns regarding microbial cell culture.	3	VALUE BASED
11.	Write short note on following (any two) – a. Application of microbial culture technology b. Culture collection centre c. Downstream Processing of Antibiotic	5	UNDERSTANDING
12.	Write in details the steps in microbial culture? Mention any 3 techniques used to count microbes in a culture? What are the benefits of culture collection centers? Name a culture collection centre in India and its location?	5	KNOWLEDGE