VIT

Vellore Institute of Technology

Continuous Assessment Test –II

Programme Name & Branch: B.Tech (Biotechnology)

Course Name & Code: Microbiology & BBIT203L

Class Number: VL2022230101408/VL2022230101410 **Slot:** D2+TD2 **Exam Duration:** 90 Minutes

Faculty: Dr. Anand A/Dr. SUNEETHA V **Maximum Marks:** 50

General Instructions:

- You are trained to be a Biotechnologist and not a story writer, answer to the point
- Remember, an answer without an example/figure is like a smartphone without internet
- It's good to have a lot of beautiful options in life but all questions are compulsory here
- Don't unnecessarily smile at the person sitting next to you, he/she may also not know the answer; this is CAT-2 you have an option to refer class notes during the exams.
- May you know more than what Robert Koch knew, All the best

(5X10=50)			
S .No.	**Questions**	**CO**	**BL**
1.	You are on an exploratory field trip to discover bacteria with potential commercial applications. How will you screen and isolate the bacteria from the soil samples? Elaborate.	5	L1
2.	Given a rare bacterial isolate from a clinical sample and asked to preserve it, what will be your approach? List the various techniques for the same and write their merits.	5	L2
3.	The microbiology Faculty plans for a visit to a bio-reserve park with rich microbial resources and if you are asked to document the only microorganism group that is known to be non-pathogenic but it's ubiquitous; and can be seen with a greenish tinge in all locations where water is present and exposed to sunlight, how will you proceed? Document the features that you will note for the complete taxonomical classification of the greenish microorganisms.	6	L3
4.	Given a choice to explore an outbreak assumed to have a bacterial cause; what are the methods and parameters that you will choose to identify and characterize the causal agent for taxonomical classification and documentation? Explain.	6	L4
5.	We hope we are in the end of the COVID-19 pandemic; discuss on the methods and approaches that will be used to identify the novel viral agents that might have potential to cause epidemics and pandemics.	7	L5

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