

Q.P. Code: **USBT 105**

2 ½ Hours

Basic Bio-Tech I

Total Marks: 75

VCD- 27/11/19

1. Attempt **all** questions.
2. **All** questions carry **equal** marks.
3. Draw **neat labeled diagrams** wherever necessary.
4. Use of **log tables** and **non-programmable calculator** is allowed.
5. For **Q 2, Q 3 and Q 4** attempt A and B **OR** C and D.

Q 1 Do as directed (Any fifteen)

15

1. ITC stands for _____
2. Blue Biotechnology is for pharmaceuticals. State true or False
3. Shantha Biotech Private Limited is known for its success in developing _____-vaccine (Hepatitis B, Hepatitis A, Polio, HIV)
4. State true or False, WCED stands for World Commission on Environment and Development
5. Define Biotechnology
6. Give an example of Traditional Biotechnology
7. Application of Biotechnology for alternate source of energy and production of bio materials is known as _____
8. Sun Up and Rainbow are varieties of genetically modified _____
9. _____ Production is prevented for delayed ripening of fruits
10. Bt Cotton is fungus resistant plant, state true or false
11. Using plants as production system for variety of macromolecules is called as _____ farming
12. Sun up is F1 generation of GM Papaya, State True or False
13. Write in one sentence, what is Blue Biotechnology ?
14. Define the term putrefaction.
15. What is the role of hops in beer production?
16. Give one example of a semi-perishable food.
17. _____ unit operation is used in freezing.
18. State True or False. Rancidity is a desirable trait of food quality.
19. Fringes Generator is used in the production of _____
[Penicillin, Wine, Vinegar]
20. State one application of the enzyme amylase.

Q. 2 A	What is Green Biotechnology ?	08
Q. 2 B	Explain White Biotechnology	07
OR		
Q. 2 C	What is Synthetic Biotechnology ?	08
Q. 2 D	Give an account on Modern vs Traditional Biotechnology	07
Q. 3 A	What is GM Papaya?	08
Q. 3 B	Explain Bt technology	07
OR		
Q. 3 C	What are plant based vaccines?	08
Q. 3 D	Describe Applications of Transgenic Livestock	07
Q. 4 A	Describe the unit operations involved in Pasteurization of milk and ice cream manufacture.	08
Q. 4 B	Discuss the role of moisture as a factor to control food deterioration.	07
OR		
Q. 4 C	Discuss applications of fermentation technology.	08
Q. 4 D	Comment on Rheology of food products as a quality factor.	07
Q. 5	Write Short notes on any three of the following	15
a.	Role of microorganisms in food production	
b.	Future of Food Biotechnology.	
c.	Golden Rice	
d.	Plant Biotechnology	
e.	GM Tomato	
