

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Question Paper Code: U8D70**

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2024

One Credit

Biotechnology

21UBT870 - BIOSAFETY REGULATIONS

(Regulations 2021)

Duration: 1.30 hours

Maximum: 50 Marks

Answer All Questions

PART A - (9 x 2 = 18 Marks)

1. Write a short note on Bio-Safety Cabinet. CO1 – U
2. List some GE Plants and the corresponding countries approved that to cultivate. CO1 – U
3. Which agency is responsible for regulating disinfectants? Write a note on it. CO2–App
4. Assume that you have transferred a gene into a vector. Now help me with a method to identify whether the transformation is successful or not. CO2–App
5. Lab instructor has asked your batch mate to prepare 1N Hcl for adjusting pH of your sample. Now, help him to choose a place to prepare it. Justify your answer. CO3–App
6. Illustrate the procedure for getting approval from the regulatory bodies to do trials and Environmental release of GMOs. CO4 – App
7. Write a short note on PCR. CO1 – U
8. List some hazards caused by chemicals in the laboratory. CO1 – U
9. Write the procedure for safely removing the gloves. CO1 – U

PART – B (2 x 16= 32 Marks)

10. (a) Write a detailed note on different Bio-safety levels and their corresponding safety measures, BSCs and types of microorganisms handled in it. CO1 – U (16)

Or

- (b) Write a detailed note on different layers of containments use in biological laboratories. CO1 – U (16)

11. (a) Analyze the requirements that are used to assess the safety of Golden rice and submit a detailed report on it. CO3-Ana (16)

Or

- (b) Stark pharma industry has planned to recruit you as a junior scientist to develop an antibiotic resistant strain. Write a report on developing such GMO to confirm your appointment. CO4- Ana (16)