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COER University

END SEMESTER EXAMINATION, EVEN SEM 2022-23

Time : 3 hours
 Program Name : B.Sc.(Hons.)Agriculture
 Course Name : Agriculture Microbiology

Total Marks : 100
 Semester : II
 Course Code : BSAG202

Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the time.

Q. No 1	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	What do you understand by pure bacterial culture ?	CO 1	1,2
(b)	Explain the contributions of the Louis Pasteur in microbiology.	CO 1	1,2
(c)	Differentiate between prokaryotes and eukaryotes.	CO 1	1,2
(d)	Describe the composition of bacterial cell wall, its structure and function.	CO 1	1,2
(e)	Discuss the terms photo autotrophy and chemoautotrophy and its importance.	CO 1	1,2
(f)	Discuss the applications of microbiology in general context.	CO 1	1,2

Q. No 2	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Write about role of Recombinant DNA technique in improving the crop quality.	CO 2	2,6
(b)	Summarize the role and functions of soil protozoa and nematodes.	CO 2	2,6
(c)	Explain the process of Conjugation.	CO 2	2,6
(d)	Discuss about Plasmids and its characteristic feature in detail.	CO 2	2,6
(e)	Write about role of microbes in Sulphur cycle .	CO 2	2,6
(f)	Describe the applications of algae and earthworm to enhance soil fertility	CO 2	2,6

Q. No 3	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Write short note : Role of Microscopy to study bacterial morphology.	CO 3	6
(b)	What is biological nitrogen fixation? Discuss the role of microbes in biological nitrogen fixation.	CO 3	6
(c)	Briefly mention the nutritional requirement of bacteria.	CO 3	6
(d)	Describe the steps involved in microbial transformation of phosphorous.	CO 3	6
(e)	Define Sterilization. What are different methods of sterilization?	CO 3	
(f)	Illustrate Mineralization and Immobilization with suitable examples.	CO 3	6

Q. No 4	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Write short note on Azolla.	CO 4	2,6
(b)	Explain the term PGPR and the role in agriculture.	CO 4	2,6
(c)	Describe the role of microbes in Sulphur cycle.	CO 4	2,6
(d)	What is biofuel? Describe its composition and approaches of biofuel production.	CO 4	2,6
(e)	Write the factors associated with the microbial pathogenicity.	CO 4	2,6
(f)	Discuss the role of microbes in the production of biogas.	CO 4	2,6

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