Printed pages: 01 Sub Code: NEV 012						
Paper	Id:	197612 Roll No:				
		B. TECH.				
		(SEM-VI) THEORY EXAMINATION 2017-18				
T'		ECOLOGICAL & BIOLOGICAL PRINCIPLES & PROCES		1 1	00	
Time:	3 Hou	ers 1ota	u Ma	rks: 1	vv	
Note:	Attem	apt all Sections. If require any missing data; then choose suitably.				
	SECTION A					
1	A 44 a		2	10	20	
1.	Atter	npt all questions in brief.	2	x10 =	20	
	a.	Define ecosystem.				
	b.	Write short note on tropic level.				
	c.	What is food chain? Explain with example.				
	d.	Define food web.				
	e. f.	Write short note on balanced ecosystem.				
		What are various parameters of fresh ground water? Describe various components of environment.				
	g. h.	Differentiate between pure and mixed cultures.				
	i.	Explain the term microbial growth.				
	j.	Define enzyme.				
	٦.	SECTION B				
2.	Atter	npt any <i>three</i> of the following:	10	x 3 =	10	
	a.	Explain in detail about any two methods exploited	for	micro		
		characterization.			bial	
	a. b. c.	characterization. Discuss the role and importance of microorganisms in the waste	assin	nilation	bial	
	b. c.	characterization. Discuss the role and importance of microorganisms in the waste what is a landfill? Elucidate in detail about the specifications of	assin landf	nilation ill.	bial	
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3.	b. c. d. e.	characterization. Discuss the role and importance of microorganisms in the waste what is a landfill? Elucidate in detail about the specifications of Illustrate the process of microbial cellular respiration and photost Elucidate the long range changes in an ecosystem with examples SECTION C	assim landf ynthe	nilation ill.	bial 1.	
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4.	b. c. d. e. Atter (a) (b) Atter (a) (b)	characterization. Discuss the role and importance of microorganisms in the waste at What is a landfill? Elucidate in detail about the specifications of Illustrate the process of microbial cellular respiration and photosy Elucidate the long range changes in an ecosystem with examples SECTION C mpt any one part of the following: Explain in detail about any two methods exploited characterization. How does the biomass and energy vary in the higher trophic level mpt any one part of the following: Represent the microbial growth curve of a simple batch Culture. Explain the various phases of microbial growth phases with relevance.	assim landf ynthe 1 for els? 10	nilation ill. sis. 0 x 1= micro	bial 10 bial 10 ons.	
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4.5.	b. c. d. e. Atter (a) (b) Atter (a) (b) Atter (a) (b)	characterization. Discuss the role and importance of microorganisms in the waste at What is a landfill? Elucidate in detail about the specifications of Illustrate the process of microbial cellular respiration and photosy Elucidate the long range changes in an ecosystem with examples SECTION C mpt any one part of the following: Explain in detail about any two methods exploited characterization. How does the biomass and energy vary in the higher trophic leve mpt any one part of the following: Represent the microbial growth curve of a simple batch Culture. Explain the various phases of microbial growth phases with relevent any one part of the following: What are the factors required for shaping microbial communication in brief the various types of interactions among species. Give the principles of carbon oxidation.	assim landf ynthe 1 for els? 10 vant e 10	nilation ill. sis. 0 x 1= micro 0x 1= equation x 1=	bial 10 bial 10 ons. 10 ure?	
4.	b. c. d. e. Atter (a) (b) Atter (a) (b) Atter (a) (b)	characterization. Discuss the role and importance of microorganisms in the waste a What is a landfill? Elucidate in detail about the specifications of Illustrate the process of microbial cellular respiration and photosy Elucidate the long range changes in an ecosystem with examples SECTION C mpt any one part of the following: Explain in detail about any two methods exploited characterization. How does the biomass and energy vary in the higher trophic leve mpt any one part of the following: Represent the microbial growth curve of a simple batch Culture. Explain the various phases of microbial growth phases with relevant any one part of the following: What are the factors required for shaping microbial communication in brief the various types of interactions among species.	assim landf ynthe 1 for els? 10 vant e 10 nity	nilation ill. sis. 0 x 1= micro x 1= equation x 1= struct	bial 10 bial 10 ons. 10 ure?	

Explain in detail about any two methods exploited for microbial

"Storage of petroleum products is a challenge.", Justify it.

 $10 \times 1 = 10$

waste.

7.

(b)

Attempt any *one* part of the following:

characterization.