



ASSESSMENT

Department of Agrotechnology

Faculty of Agriculture

University of Islam Malang

Subject : Basics of Microbiology
Credits : 3 credits/ 5.1 ECTS
Subject Code : MKW 60617
Semester : 3
Parallel Class : A, B, C

Appendix 1. Scoring Matrix

Nomenclature	Weight	Final Score	
		Letter Mark	Score average
Assignment	20%	A	80 – 100
Midle semester test	25%	B	70 - <80
Final semester test	25%	C	55 - <70
Practice	20%	D	50 - < 55
Presence	10%	E	0 - <50

Appendix 2. Question samples

1. Microorganisms that have characteristics: the body is in the form of hyphae which are heterotrophs. They can live as obligate parasites, facultative parasites, saprophytes, symbiotic mutualism. By habitat: in water and on land, in places rich in organic matter, humid, slightly acidic, and lack of light, what are the characteristics of what microorganisms? (CLO 1)
2. Microorganism biomass is an index of soil fertility. Soil that contains many kinds of microorganisms, in general it can be said that the soil is a soil with good physical and chemical properties. The high population of microorganisms and the diversity of microorganisms can only be found in soils that have properties that allow these soil microorganisms to thrive and be active. What factors must be met, so that soil microorganisms can grow and develop in the soil? Mention and explain at least 5 factors! (CLO 2)
3. Soil microorganisms are important factors in soil ecosystems, because they affect the cycle and availability of plant nutrients and the stability of soil structure. Microorganismal biomass is the living part of soil organic matter, what is it? Name the types of soil microorganisms and explain the differences. (CLO 3)
4. In addition, the biomass of soil microorganisms is a source of various plant nutrients and also an agent for the formation of these nutrients. In addition, it is an agent that breaks down all organic matter that enters the soil, converting it into the form of simple inorganic compounds, so that plants can use it again. This microbial biomass plays an important role in maintaining soil fertility and in the carbon, nitrogen, phosphorus and sulfur cycles. Explain how the methodology/procedure for determining the abundance of microorganisms in the soil, at least for 2 types of microorganisms. (CLO 4)

Appendix 3. Achievement of CLO

Class A

Meetings	CLO 1 (%)	CLO 2 (%)	CLO 3 (%)	CLO 4 (%)
1	85			
2	67			
3		66		
4		65		
5		66		
6			67	
7			66	
8				66
9				66
10			68	
11	71			
12	75			
13	80			
14	82			
Average	77	66	67	66
Predicate	EXCELLENT	SATISFACTORY	SATISFACTORY	SATISFACTORY

Class B

Meetings	CLO 1 (%)	CLO 2 (%)	CLO 3 (%)	CLO 4 (%)
1	88			
2	72			
3		71		
4		70		
5		70		
6			70	
7			70	
8				72
9				73
10			74	
11	77			
12	76			
13	78			
14	83			
Average	79	70	71	73
Predicate	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT

Class C

Meetings	CLO 1 (%)	CLO 2 (%)	CLO 3 (%)	CLO 4 (%)
1	87			
2	71			
3		69		
4		70		
5		68		
6			68	
7			70	
8				69
9				70
10			71	
11	72			
12	76			
13	81			
14	82			
Average	78	69	70	70
Predicate	EXCELLENT	SATISFACTORY	EXCELLENT	EXCELLENT

Standard

Std num-based AI		Weighted avg LO based AI	
70 <= AI	HIGH	70 <= AI	EXCELLENT
60 <= AI < 70	MEDIUM	60 <= AI < 70	SATISFACTORY
50 <= AI < 60	LOW	50 <= AI < 60	DEVELOPING
AI < 50	VERY LOW	AI < 50	UNSATISFACTORY

