UNIVERSITAS SUMATERA UTARA (USU)
FACULTY OF AGRICULTURE
Animal Sciences Study Programme

Documen Code (to follow

SEMESTER LEARNING PLAN (RPS)

COURSE (MK)	CODE	Course Group	WEIGHT (credits)		SEMESTER	Date of Prepara
BIOCHEMISTRY	PTN1204	Exact	**Theory** = 2	**Practice** = 1	II	January 2024

AUTHORISATION/ATTESTATION	RPS Developer Lecturer	Approved Head of Study Programme	Chairman of LINK-UP USU
	Tati Vidiana Sari, S.Pt., MP, IPM Ir. Peni Patriani, S.Pt., MP, IPM, ASEANEng Uswatun Hasanah, S.Pt., M.Si	Dr. Ir. Ma'ruf Tafsin, M.Si, IPM	Prof. Dr Dwi Suryanto M.Sc.

Learning Outcomes	LO-Study Programme Charged to Course	
	LO01	Able to apply logical, critical, systematic and innovative thinking through the approach and implementation of animal science technology by applying the character of STARS
	LO13	Know the concept of identification, safety with a cross-multidisciplinary approach in the field of animal science

Course Learning Outcomes (CLO)	CLO Weight
CLO0111: Able to explain logically and critically about biochemical aspects, types and workings of enzymes, metabolism of food substances and the formation process of macronutrients and micronutrients in the body of livestock.	53%
CLO1309: Able to analyse biochemical relationships in various aspects of science within the scope of monodisciplinary and/or interdisciplinary.	47%

End Capability of Each Learning Stage (Sub-CLO)	
Sub-CLO1	After attending this lecture, students will be able to understand the lecture contract, assessment evaluation and be able to expl the role of biochemistry in the field of animal husbandry.
Sub-CLO2	After attending this lecture, students will be able to explain about cell structure and organisation, cell function and its compon
Sub-CLO3	After attending this lecture, students will be able to explain the definition of metabolism, grouping of metabolism (anabolism catabolism), factors that affect metabolism
Sub-CLO4	After attending this lecture, students will be able to explain the definition of enzyme, enzyme activity, factors that affect enzy activity
Sub-CLO5	After attending this lecture, students will be able to explain the structure and classification of carbohydrates.

	Sub-CLO6	After attending this lecture, students will be able to explain the process of carbohydrate metabolism in the livestock body.
	Sub-CLO7	After attending this lecture, students will be able to explain the structure and function of amino acids.
	Sub-CLO8	After attending this lecture, students will be able to explain protein metabolism in the livestock body.
	Sub-CLO9	After attending this lecture, students will be able to explain the structure, classification and metabolism of fat in the lives body.
	Sub-CLO10	After attending this lecture, students will be able to explain the metabolism of vitamins and minerals in the body of livestock.

Correlation of CLO with Sub-CLO

	Sub-CLO1	Sub-CLO2	Sub-CLO3	Sub-CLO4	Sub-CLO5	Sub-CLO6	Sub-CLO7	Sub-CLO8	Sub-CLO9	Sub-CLO10
CLO0111		√	√	√	√	√	√	√	√	√
CLO1309	√	√	√	√		√		√	√	√

Brief Course Description

After completing the Biochemistry course, students are expected to become graduates who are able to understand the basic science of an husbandry and the relationship of the course with other courses logically, critically and systematically so that they can identify the conce science relationships between other courses and Biochemistry courses. This course is conducted with the language of instruction, na Indonesian, and face-to-face meetings are conducted 14 times consisting of structured assignments and practicum both offline and online.

Study Material:

Learning Materials

BK02 Basic Animal Science
BK04 Animal Nutrition and Feed Science

1. Lecture contract and scope of Biochemistry
2. Cell structure and organisation, cell function and its components
3. Definition of metabolism, grouping of metabolism (anabolism & catabolism), factors that affect metabolism
4. Definition of enzyme, enzyme activity, factors that affect enzyme activity
5. Structure and classification of carbohydrates
6. Carbohydrate metabolism
7. Amino acid structure and function
8. Protein metabolism
9. Structure, classification and metabolism of fats
10. Vitamin and mineral metabolism

References

Main:

	1. Anna Poedjiadi and F.M. Titin Supriyanti, Basics of Biochemistry, Jakarta: UI-Press, 1994. 2. Adugna, Solomon et al. (2004). Medical Biochemistry. Adis Ababa: Ethiophia Public Health Training Initiative. 3. Hala, Yusminah and hartono. 2014. General Biochemistry Handbook. Makassar: Department of Biology FMIPA UNM. 4. Poedjiadi, Anna. 1994. *Basics of Biochemistry*. Gadjah Mada University Press: Yogyakarta. 5. Robert T. Marison & Robert N. 1992. Organic Chemistry. Sixth Edition. Prentice-Hall. England Cliffs, New Jersey 6. Salazar, Andrew, Michael Keusgen, Jörg von Hagen. (2016). Amino Acids In The Cultivation Of Mammalian Cells. Amino A Journal. 48:1161-1171. DOI 10.1007 7. Wahab, H. M. 2004. *Introduction to Biochemistry Revised Edition*. Bayu Media Publishing: Malang 8. Winarno. 2001. *Basics of Organic Chemistry*. Bumi Aksara: Jakarta
	Additional : 1. National and international journals 2. Practicum guide
Lecturer	Tati Vidiana Sari, S.Pt., MP, IPM Ir. Peni Patriani, S.Pt., MP, IPM, ASEANEng Uswatun Hasanah, S.Pt., M.Si
Conditional Subjects	

	End ability of each learning stage (Sub-CLO)	**Assessment**		**Forms of Learning; Learning Methods; Student Assignment; [Estimated Time]**		**Study Material (Learning Materials)**	**Assess t Wei (%**
		Indicators	**Criteria and Techniques**				
(1)	**(2)**	**(3)**	**(4)**	**Asynchronous (5)**	**Synchronous (6)**	**(7)**	**(8)**
1	Sub-CLO1: After attending this lecture, students will be able to understand the lecture contract, assessment evaluation and be able to explain the role of biochemistry in the field of animal husbandry.	Accuracy in explaining the scope and role of Biochemistry courses in the field of animal husbandry	**Criteria:** - **Techniques:** *Non test*	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** a. Attendance b. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion **Activities:** a. Online/offline learning b. Class discussion c. Take notes on learning materials	**Subject matter:** a. Course Contract b. Scope of introductory biochemistry	Task (CLO)

				Agreement, and Learning Materials **Moda (*Learning Management System*):** class.usu.ac.id	**Media:** a. Slides/ ppt b. Zoom meeting/ LCD c. Text book		
2	Sub-CLO 2: After attending this lecture, students will be able to explain about cell structure and organisation, cell function and its components	a. Accuracy in explaining the definition and function of cells b. Accuracy in explaining the groups and components of cells in the body of living things c. accuracy in explaining biochemical *assessment*	**Criteria:** Using an assessment rubric **Techniques:** *Non test*	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** a. Attendance **Moda (*Learning Management System*):** class.usu.ac.id	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion **Activities:** **a.** Online/offline learning **b.** Class discussion **c.** Take notes on learning materials **Media:** a. Slides/ ppt b. Zoom meeting/ LCD c. Text book	**Subject matter:** a. Cell definition b. Cell function c. Cell group d. Cell components	This su CLO w be *asse* during UTS w weight 10% p cent of UTS assessr weight (20%).
3	Sub-CLO 3: After attending this lecture, students will be able to explain the definition of metabolism, grouping of metabolism (anabolism &	a. Accuracy in explaining the definition of metabolism b. Accuracy in explaining the difference between catabolism and anabolism	**Criteria:** Using an assessment rubric **Techniques:** *Non test*	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** a. Attendance	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion **Activities:** a. Online/offline learning b. Class discussion	**Subject matter:** a. Definition of metabolism b. Difference between anabolism and catabolism c. Factors affecting metabolism	This su CLO w be *asse* during UTS w weight 10% p cent of UTS assessr

	catabolism), factors that affect metabolism	c. accuracy in explaining the factors that affect metabolism d. accuracy in explaining biochemical *assessment*		**Moda (*Learning Management System*):** class.usu.ac.id	c. Take notes on learning materials **Media:** a. Slides/ ppt b. Zoom meeting/ LCD c. Text book	d. Biochemical evaluation	weight (20%).
4	Sub-CLO 4: After attending this lecture, students will be able to explain the definition and types of enzymes, enzyme activity, factors that affect enzyme activity.	a. Accuracy in explaining the definition and types of enzymes b. Accuracy in explaining the activities and factors that affect the type of enzyme c. accuracy in explaining biochemical *assessment*	**Criteria:** Using an assessment rubric **Techniques:** *Test:* *Quiz*	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** a. Attendance b. Completing quiz ***Quiz 1:*** *Quiz to measure students' understanding of the definition, types and factors affecting enzyme action.* **Moda (*Learning Management System*):** class.usu.ac.id	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion **Activities:** a. Online/offline learning b. Class discussion c. Take notes on learning materials **Media:** a. Slides/ ppt b. Zoom meeting/ LCD c. Text book	**Subject matter:** a. Definition of enzyme b. Types of enzymes c. Factors affecting enzyme action d. Biochemical evaluation	Quiz 1 (CLO & Cl 130
5	Sub-CLO 5:	a. Accuracy in explaining the	**Criteria:** Using an assessment rubric	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:**	TM (1 week x 2 credits x 50 minutes) **Learning Methods:**	**Subject matter:** a. Definition of carbohydrate	Quiz 2 (CL 011

	After attending this lecture, students will be able to explain the structure and classification of carbohydrates.	structure of carbohydrates b. Accuracy in explaining the classification of carbohydrates c. accuracy in explaining biochemical *assessment*	**Techniques:** *Test:* *Quiz*	*Self-Paced Learning* **Activities:** a. Attendance b. Completing the quiz ***Quiz 2:*** *Quiz to measure students' understanding of the structure and classification of carbohydrates* **Moda (*Learning Management System*):** class.usu.ac.id	a. Lecture b. Discussion **Activities:** a. Online/offline learning b. Class discussion c. Take notes on learning materials **Media:** a. Slides/ ppt b. Zoom meeting/ LCD c. Text book	b. Structure of carbohydrates c. Classification of carbohydrates d. Biochemical evaluation	
6-7	Sub-CLO 6: After attending this lecture, students will be able to explain carbohydrate metabolism in livestock.	a. Accuracy in explaining carbohydrate digestion and the breakdown of carbohydrates through glycolysis and the TCA cycle b. Accuracy in explaining carbohydrate synthesis	**Criteria:** Assessment Rubric **Techniques:** *Test:* a. *Quiz* *b. PBL*	KM+PT (2 weeks x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *a. Recording attendance* *b. Completing quizzes and assignments* *c. Field visit* ***PBL 1-2:***	TM (2 weeks x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion **Activities:** a. Online/offline learning b. Class discussion c. Take notes on learning materials **Media:**	**Subject matter:** a. carbohydrate digestion and breakdown of carbohydrates through glycolysis and the TCA cycle b. Carbohydrate synthesis	Cas meth 20% Quiz 1.5 (CLO & Cl 130

				a. Divide the group evenly (lecturer divides) b. Make a *report of* the practicum carried out by each group (A4; TNR 12 pt; max 5 pages containing the results of the practicum) ***Quiz 3:*** *Quiz to measure students' understanding of carbohydrate metabolism* **Moda (*Learning Management System*):** class.usu.ac.id	a. Slides/ ppt b. Zoom meeting/ LCD c. Text book		
8	MID SEMESTER EXAMINATION						20%
9	Sub-CLO 7: After attending this lecture, students will be able to explain the structure and function of amino acids.	Accuracy in explaining the structure and function of amino acids	**Criteria:** Using an assessment rubric **Techniques:** *Non test*	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** a. Attendance	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion **Activities:** a. Online/offline learning	**Subject matter:** a. Protein structure b. Protein/amino acid function	This CLO be *asse* during UAS a weig 10% cent o UA assess

				Moda (*Learning Management System*): class.usu.ac.id	b. Class discussion c. Take notes on learning materials **Media:** a. Slides/ ppt b. Zoom meeting/ LCD c. Text book		weig (20%
10-11	Sub-CLO 8: After attending this lecture, students will be able to explain protein metabolism	a. Accuracy in explaining the definition of protein metabolism b. Accuracy in explaining protein biosynthesis	**Criteria:** Using an assessment rubric **Techniques:** *Test:* *Quiz*	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** a. Attendance b. Completing the quiz ***Quiz 4:*** *Quiz to measure students' understanding of protein metabolism* **Moda (*Learning Management System*):** class.usu.ac.id	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion **Activities:** a. Online/offline learning b. Class discussion c. Take notes on learning materials **Media:** a. Slides/ ppt b. Zoom meeting/ LCD c. Text book	**Subject matter:** a. Definition of protein metabolism b. Protein biosynthesis	Quiz 1.5% (CLO & Cl 130
12-13	Sub-CLO 9: After attending this lecture, students will be able to explain the structure,	a. Accuracy in explaining the definition and structure of fat b. Accuracy in explaining the	**Criteria:** Assessment Rubric **Techniques:** *Test:* *Case Method*	KM+PT (2 weeks x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:**	TM (2 weeks x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion	**Subject matter:** a. Definition and Structure of fat b. Fat characteristics c. Fat classification	PBL 30% (CLO & Cl 130

	classification and metabolism of fats.	classification of fats c. Accuracy in explaining fat metabolism d. Accuracy in explaining fat oxidation e. Accuracy in explaining cholesterol f. Accuracy in explaining fat biosynthesis		*a. Recording attendance* *b. Completing assignment* ***PBL 3-4:*** a. Divide the groups evenly (same group as the *practicum* activity) b. Make a paper on the types and metabolism of fat in the body of livestock (maximum 15 pages from table of contents to bibliography, TNR font 12 pt spacing 1.5 sent in pdf form c. Group presentation **Moda (*Learning Management System*):** class.usu.ac.id	**Activities:** a. Online/offline learning b. Class discussion c. Take notes on learning materials d. Presentation **Media:** a. Slides/ ppt b. Zoom meeting/ LCD c. Text book	d. Fat metabolism e. Fat oxidation f. Cholesterol g. Fat biosynthesis	
14	Sub-CLO 10: After attending this lecture, students will be able to explain the	Accuracy in explaining vitamin and mineral metabolism	**Criteria:** Using an assessment rubric **Techniques:**	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced*	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** c. Lecture	**Subject matter:** a. Structure of vitamins and minerals	This CLO be *asse* duri UAS

	metabolism of vitamins and minerals.		*Non test*	*Learning* **Activities:** a. Attendance **Moda (*Learning Management System*):** class.usu.ac.id	d. Discussion **Activities:** a. Online/offline learning b. Class discussion c. Take notes on learning materials **Media:** d. Slides/ ppt e. Zoom meeting/ LCD Text book	b. Classification of vitamins and minerals c. Vitamin and mineral metabolism	a weig 10% cent o UA assessi weig (20%
16	FINAL SEMESTER EXAMINATION						20%

Form of Evaluation	CLO0111	CLO1309
Quiz	Quiz grading	Quiz grading
Task		Paper Assessment
Case Method (presentation and participation in discussion, and *practicum/field visit* report)	a. Presentation assessment rubric	a. Presentation assessment rubric b. Practicum report
Project Based Learning (PBL) (presentation and participation in discussion, and *practicum/field visit* report)	a. Presentation assessment rubric	a. Presentation assessment rubric b. Practicum report

UTS	Mid-term test assessment (multiple choice questions and essay questions)	Mid-term test assessment (multiple choice questions and essay questions)
UAS	UAS assessment (multiple choice questions and essay questions)	UAS Assessment (multiple choice questions and essay questions)

Assessment Plan

Form of Evaluation	**Weight (100%)**	**Frequency**
Quiz	5	4 (held on week 4, 5, 7, 11)
Task	5	1 (held on week 1)
Case Method	20	2 (held on week 6,7)
PBL	30	2 (held on week 12,13)
UTS (Mid Semester Examination)	20	1 (held on week 8)
UAS (Final Semester Examination)	20	1 (held on week 16)
Total	**100%**	

Explanation:

a) Quiz 5%
During the semester there will be 2 quizzes organised in class. The quizzes will be conducted via e-learning and are scheduled in advance. The material tested is announced by the lecturer and written in the RPS. During the semester there will be 2 structured assignments. The assignments given are an effort to add insight by making a resume related to the material written in the SSP

b) Task 5%
During the semester there will be 1 task organised in class. The task will be conducted via e-learning and are scheduled in advance. The material tested is announced by the lecturer and written in the RPS. During the semester there will be 2 structured assignments. The assignments given are an effort to add insight by making a resume related to the material written in the SSP.

c) Case Method 20%
During the semester there will be case methods, each student will make a paper and report on each case method in groups. Case method in this course is conducted 2 times. The papers that have been made will be presented by students. Students will be assessed according to their participation in the presentation and accuracy in the presentation, as well as their participation in the question and answer session when other groups present.

d) Project based learning 30%
During the semester there will be PBL, each student will make a paper and report from each PBL in groups. PBL in this course is conducted 2 times. The papers that have been made will be presented by students. Students will be assessed according to their participation in the presentation and accuracy in the presentation, as well as their participation in the question and answer session when other groups make presentations.

e) UTS 20%
The midterm exam covers all the material that has been covered since the beginning of the semester until the 7th meeting, both readings and lectures. This exam is conducted in class with multiple choice, short answer, and essay questions.

f) UAS 20%
The end-of-semester exam covers all the material that has been covered from the 9th to the 15th meeting, both readings and lectures. This exam is conducted in class with multiple choice, short answer, and essay questions.

ASSESSMENT RUBRIC

Quiz Scoring Rubric:

Quiz consists of 5 essay questions done on a sheet of paper (done 2 times during 1 semester)

Value per item	Criteria
16-20	Can answer the question correctly, the steps of working on the problem are correct, and completely correct.
11-15	The steps of working on the problem are correct, there are few mistakes
6-10	Most of the steps are correct, there are many errors
0-5	The steps of working on the problem are not correct, unable to solve the problem

*Maximum score = 100 (5 questions x 20 points)

Teaching Journal/Proposal/Report/Paper Assessment Rubric:

Assessment Criteria	4 Very good	3 Good	2 Simply	1 Less
Understanding of Learning Topics with Resumed Journals	Understand the topic exactly once (25)	Understand the topic (20)	Does not fully and appropriately understand the topic (15)	Not understanding the topic (10)
Contents	Drafts show understanding participants integrate information that has been learned and/or assigned to read during lectures properly and appropriately. (25)	Drafts demonstrate an understanding of the material covered and integrate some of the information that has been learned and/or assigned to read during lectures. (20)	Drafts show an understanding of the material covered and only integrate a small portion of the information that has been learned and/or assigned to read during the lecture. (15)	Drafts show a lack of understanding of the material discussed so that it is not clear and does not integrate the material. information that has been learned and/or assigned to read during lectures. (10)
Clarity of Writing	All writing ideas are well and clearly conveyed. (25)	Most of the ideas are well-written and clear. (20)	Some of the ideas are well-written and clear. (15)	The idea of the writing is not conveyed well and clearly. (10)
Language Clarity	Uses foreign/Indonesian language well and correctly few grammatical and word choice errors that do not interfere with understanding. (25)	Uses foreign/Indonesian language well and correctly with few grammatical and word choice errors that interfere with understanding. (20)	Uses foreign/Indonesian language fairly well and correctly with some grammatical and word choice errors. (15)	Does not use foreign/Indonesian language properly and correctly as the writing contains many grammatical and word choice errors. (10)
Total	**81-100 (Excellent)**	**61-80 (Good enough)**	**41-60 (Enough)**	**0-40 (Less)**

Group Presentation Task Assessment Rubric:

CATEGORIES	4	3	2	1

	Very good	Good	Simply	Less
Group Preparation	The group is fully prepared and has optimized presentation exercises. Mutual complementarity between group members with clear tasks for each group member. (25)	The group seemed reasonably prepared but may need more practice presenting. The responsibilities of each group member need to be identified. (20)	The group made an effort to prepare but did not do any presentation preparation exercises. Tasks and responsibilities are assigned and accepted without careful consideration. (15)	The group seemed to have done no preparation at all for the presentation. Tasks and responsibilities are assigned and accepted randomly. (10)
Presentation Organization	The group presented the content clearly, logically, and systematically, through a cohesive introduction, main points, and conclusion. The group used visual aids that effectively supported and reinforced the presentation. (25)	The group presented the content logically and systematically, with an introduction, main idea and conclusion. The group used visual aids that showed a link to the content of the presentation. (20)	The group presented the content fairly logically and systematically, but it did not contain an introduction, main idea, or conclusion. The group occasionally used visual aids that did not support the content of the presentation. (15)	The group presented the content randomly without any introduction, main idea, or conclusion. Groups using unsupportive visual aids or no visual aids at all. (10)
Task Achievement	Each group member is able to demonstrate solid knowledge through their own exposure and elaboration, and deliver the part of the presentation that is assigned to them within the time allotted. (25)	Each group member demonstrates good knowledge through their own exposure and elaboration but in less time than the time allocated to them. (20)	Each group member demonstrated sufficient knowledge but failed to elaborate, and presented his or her part in only half the time allotted to him or her. (15)	Each group member has no knowledge of the content and presents his/her section in less than half the time allocated to him/her. (10)

Mastery of Presentation Content	Each group member demonstrates full understanding of the presentation topic. The main points presented are supported by evidence and critically evaluated. (25)	Each group member demonstrated a good understanding of the presentation topic. Most of the main points are illustrated with relevant evidence. (20)	Each group member demonstrated a good understanding of some aspect of the topic. Some illustrations are given, but not critically evaluated. (15)	Each group member did not seem to understand the presentation topic very well. Some evidence was mentioned, but not integrated in the presentation or evaluated. (10)
Answers to Questions	The group was able to correctly answer almost all the questions asked by the audience about their presentation topic. (25)	The group was able to correctly answer most of the questions asked by the audience about the tropes of their presentation. (20)	The group was able to correctly answer some of the questions the audience asked about their presentation topic. (15)	The group was unable to answer the questions posed by the audience on the topic of their presentation appropriately. (10)
Communication Quality	Group interaction with the audience shows interest and respect for the opinions of others. Responses support effective communication. (25)	Group interaction with an audience shows interest and respect for the opinions of others. Responses generally support effective communication. (20)	Some parts of the interaction in the discussion show interest and respect for others' opinions. (15)	Interaction in the discussion shows disrespect for other people's opinions. Responses do not support effective communication. (10)
Total	**81-100 (Excellent)**	**61-80 (Good enough)**	**41-60 (Enough)**	**0-40 (Less)**

Source: Halimi, Sicily. "Assessment Rubric: Learning Plan Book MK Introduction to Teaching Methods", 2021
Maximum score: 25 x 6 components = 150 points: 1.5 = 100

Essay Writing Exam Scoring Rubric:

Assessment Criteria	4 Very good	3 Good	2 Simply	1 Less

Understanding of the Question	Understand the question exactly once (25)	Understand the question (20)	Does not understand the question fully and correctly (15)	Did not understand the question (10)
Contents	Answers show understanding participants integrate information that has been learned and/or assigned to read during lectures properly and appropriately. (25)	Answers demonstrate an understanding of the material in question and integrate some of the information learned and/or assigned to read during the lecture. (20)	Answers show a lack of understanding of the material in question and only integrate a small portion of the information that has been studied and/or assigned to read during the lecture. (15)	The answer shows a lack of understanding of the material in question, so it is not clear and does not integrate the material. information that has been learned and/or assigned to read during lectures. (10)
Clarity of Writing	All writing ideas are well and clearly conveyed. (25)	Most of the ideas are well-written and clear. (20)	Some of the ideas are well-written and clear. (15)	The idea of the writing is not conveyed well and clearly. (10)
Language Clarity	Uses foreign/Indonesian language well and correctly few grammatical and word choice errors that do not interfere with understanding. (25)	Uses foreign/Indonesian language well and correctly with few grammatical and word choice errors that interfere with understanding. (20)	Uses foreign/Indonesian language fairly well and correctly with some grammatical and word choice errors. (15)	Does not use foreign/Indonesian language properly and correctly as the writing contains many grammatical and word choice errors. (10)
Total	**81-100 (Excellent)**	**61-80 (Good enough)**	**41-60 (Enough)**	**0-40 (Less)**

Multiple Choice Exam Scoring Rubric:

Value per item	Criteria
100/many questions	Can answer the question correctly
0	Answers are less precise / not in accordance with the answer key that has been provided

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