

 <p> MINISTRY OF EDUCATION, CULTURE, RESEARCH AND TECHNOLOGY UNIVERSITAS NEGERI JAKARTA FACULTY MATHEMATICS AND KNOWLEDGE KNOWLEDGE NATURAL PRODI PHYSICS & EDUCATION PHYSICS Campus A UNJ Rawamangun, G-d. Hasjim Asj'arie Lt. 5 Jl. Rawamangun Advance No. 1 Jakarta 13220 Tel. 021-29266285/29266284 </p>	EXAM END OF SEMESTER 118	
	METHODOLOGY STUDY	
	Date and time	Wednesday, June 14 2023
	Time Processing	100 Minute (13.00-14.40)
	Place	GHA R: 303, 304, Labkom
	Study Program	S1 Physics Education
	Lecturer	Dr. Firmanul C Wibowo, M.Pd.

Instruction:

1. Question answered in Language Indonesia
2. Answer from Question handwritten on folio paper striped

QUESTION

1. Based on the journal analysis that has been carried out, there is agreement that the research started with exists gap problem between theory with reality. How your view on this matter? How to implement it in thesis research You? (mak. 25)
2. There is the term "*State of the Art*" (SOTA) which can be interpreted as contemporary or trendy. In research there is also a concept called "*Novelty*" (derived from Latin word *novus* for "new") is the quality of being new, or following from that, of being striking, original or unusual or easy language to contribute to research. Explain the position Your thesis research is associated with SOTA and Novelty. Write it in tabular form like below, maximum 1 sentence. (mak. 25)

Title Thesis	<i>(State of The Art)</i> SOTA	Novelty (Contribution)

3. Take note Table Following (Mac. 25):

Title Thesis	Type Study	Test statistics Which appropriate
Effects of Augmented Reality Integration (ARI) Based Model Independent Physics Learning (MPIL) For Facilitating 21st-Century Skills (21-CS)		
Development of Digital Magnet Module (MIGT) Based on Science, Technology, engineering, and Mathematics (STEM) Helpful Flipbook		

4. Explain the difference between RnD research approaches (4D, ADDIE) and quantitative research (Experiment &/ quasi-experiment) from the aspect of understanding and use? (make in form table) (max. 25)