

## ABSTRACT

**Innes Andriani, 2021.** “Identification of Physical Concepts Problem in Answering The National Exam Questions at Senior High School in Pesisir Selatan District”

The 21st century is a century with an education system that refers to the 2013 curriculum which requires teachers to apply learning that is directed to find out information so that it can help students to have a deeper mastery of concepts. This is related to the physics learning process carried out by teachers in schools such as students not only being required to have mathematical abilities, but also the ability to understand physics concepts. The results of the initial documentation study show that in education center data (2018) the average value of the National Exam in physics at Senior High School level in Pesisir Selatan District is still relatively low. The low value of the National Exam (NE) proves that there are still many students who have difficulty in working on the questions. The number of errors made by students in working on questions can be an indication of the extent to which students can understand the material that has been conveyed by the teacher. Therefore, research analysis of the problematic physics concepts was carried out in answering the questions of the National Exam at Senior High School in Pesisir Selatan District.

This research is descriptive research with a qualitative approach. The population of the data in this study was all Senior High School that held the National Exam in Pesisir Selatan District which consisted of 21 schools. Sampling is done by using the technique *Proportionate Stratified Random Sampling*. The sample of this study was 6 schools that held the National Exam in Senior High School in Pesisir Selatan District. The data in this study were taken from the 2018 and 2019 Physics National Exam in education center data (2018) and also used an instrument to identify problematic physics concepts in answering the National Exam questions at Senior High School throughout Pesisir Selatan District, as well as data collection techniques through documentation study.

Based on the research that has been done, the results of the identification of problematic physics concepts in 2018 consist of 6 main materials including Measurement and Kinematics material with an error percentage of 58.68%; Dynamics with an error percentage of 69.33%; Work, Energy and Collision with an error percentage of 64.79%; Heat with an error percentage of 57.74%; Wave and Light with an error percentage of 65.95%; and Magnetism and Core Physics with an error percentage of 45.45%. Then, in 2019 it consisted of 4 main materials including Mechanics with an error percentage of 58.16%; Wave and Optics with an error percentage of 65.87%; Thermodynamics with an error percentage of 68.23%; and Magnetism and Modern Physics with an error percentage of 57.90%.

**Keywords:** Identification, Physics Concepts, National Exam