## Pemburuan Maya Forensik: Kes Biobahaya

## Synopsis

Pemburuan Maya Forensik: Kes Biobahaya is a new addition to the STEM UNISEL product lineup, created by students of UNISEL with the guidance of STEM UNISEL lecturers. It is the second set of the Pemburuan Maya Forensik product and centred on the theme of biohazard. This online product is an interactive murder mystery deduction challenge that takes approximately 3-4 hours to complete, challenging participants with cryptic riddles, puzzles, brain teasers, and forensic science experiments to determine the murderer.

The product is affordably priced at RM20 per group and encourages the development of STEM skills, including critical thinking, problem-solving, and decision-making. Pemburuan Maya Forensik: Kes Biobahaya is funded by Dewan Bahasa dan Pustaka (DBP) and is designed in Bahasa Melayu to promote scientific terminology in the local language. It is unique as there is a lack of similar products in the market, and most deduction mystery games are marketed overseas.

Survey feedback from approximately 2179 students from 416 schools has been overwhelmingly positive, and the product has potential as an excellent tool for promoting STEM education, inspiring students to engage with science, and highlighting the use of local language in scientific terminology.

## Product Description

The Pemburuan Maya Forensik: Kes Biobahaya is a STEM product created by UNISEL students with the guidance of STEM UNISEL lecturers. It is the second module in the Pemburuan Maya Forensik product, designed for students who want to embark in an exciting virtual hunt to solve a biohazard-related murder mystery. The product takes approximately 3-4 hours to complete and involves cryptic riddles, puzzles, brain teasers, and forensic science experiments, and requires participants to determine the murderer. The cost of the activity is an affordable RM20 per group.

The objective of this product is to revolutionize STEM education by providing a fun and interactive learning experience that is not limited by physical boundaries. By eliminating geographical barriers, this product offers an opportunity for students to participate in knowledgeable STEM activities from the comfort of their own homes. The product seeks to instill a passion for learning STEM, while simultaneously building essential soft skills such as problem-solving, creativity, and communication.

The Pemburuan Maya Forensik: Kes Biobahaya is based on a detective role-play setup that is hosted by Google Form. Students are tasked with solving crime mysteries virtually using 10 different forensic evidence, divided into 10 sections of varying difficulty levels, which requiring students to solve each one to identify the murderer. The learning experience is enhanced through the use of several educational theories. The constructivism learning theory enabling participants to engage in experiential learning and play the role of a detective to solve the murder by deducing clues. The gamification learning theory is also incorporated, adding motivation to the learning

process by providing a sense of enjoyment and positive feelings to the participant as they solve the mystery. The fun learning approach is reinforced by the role-playing element of being a detective, igniting the passion of the participants while also challenging their knowledge without causing intimidation or exhaustion.

The product was inspired by a previous STEM Forensic module that won the Gold Medal at the Malaysia Technology Expo (MTE) 2019. The product was first introduced in 2022 at the Program STEM Forensik 2022, which was organized jointly by Dewan Bahasa dan Pustaka (DBP), National STEM Association, and Universiti Selangor. Funded by DBP, the product is designed in Bahasa Melayu, promoting scientific terminology in the local language. The product is unique, and there are few similar products in the market, most of which are found overseas.

In summary, the Pemburuan Maya Forensik: Kes Biobahaya is a STEM product that offers students an opportunity to develop essential STEM skills such as critical thinking, creativity, problem-solving, and decision-making while they solve a thrilling biohazard-related murder mystery. The product provides an exciting opportunity for students to engage with science through its fun and interactive approach, while promoting the use of local language. With its incorporation of various educational theories, the product provides an effective learning experience that encourages participation and motivates students to learn. It is a breakthrough in STEM education, providing a commercially viable module for an enhanced STEM learning process that can be enjoyed by students from anywhere.