UNIVERSITI TEKNOLOGI MARA

ANSWER BOOKLET OPTIMIZATION USING SIMULATION TECHNIQUE

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STUDENT'S DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Optimum can be described as the best or most suitable for a particular purpose. Optimization technique has the capability to increase the profit of a firm, minimize the operational cost and reduce the wastages. A study showed that there is a significance budget reduction for three consecutive years for each public universities by Ministry of Education (MOE) that has affected the financial management of Malaysia Public universities, especially Universiti Teknologi MARA (UiTM). In conjunction, the purpose of this study is to determine the optimum number in Main Answer Booklet (MAB) and Additional Answer Booklet (AAB) and to reduce cost of wastage in both Answer Booklet production by using simulation technique. Eventually, from the survey, it can be seen that the optimum number of pages in Main Answer Booklet (MAB) and Additional Answer Booklet (AAB) is 13 pages and 9 pages with the cost of waste is RM1,351.49. As a result, UiTM Perlis Branch especially and UiTM generally need to redesign the Answer Booklet so that the cost that has been allocated for the Answer Booklet can be saved and decreased, and the students can fully utilize the pages in Main Answer Booklet (MAB) and Additional Answer Booklet (AAB) which benefit both parties.

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