

**A CASE STUDY ON WATER CONSERVATION
AWARENESS AND WATER QUALITY AT UiTM
PULAU PINANG COLLEGES**

FIRDAUS SYUHADA MOHAMAD

**Bachelor Engineering (Hons) (Civil)
UNIVERSITI TEKNOLOGI MARA**

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By

FIRDAUS SYUHADA MOHAMAD

Report is submitted as
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DECLARATION BY CANDIDATE

I Firdaus Syuhada Mohamad, UiTM no 2001498568 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

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ABSTRACT

As Penang marches towards the 21st Century, our water demand will continue to increase, even as water supply issues become increasingly complex. As such, we need to manage water supply more effectively and innovatively. The objective of this study is to observe the level of water conservation among UiTM Pulau Pinang students and to determine the value of pH, conductivity, Biochemical Oxygen Demand (BOD), Suspended Solid (SS) and the quality of drinking water supplied in Kolej Zamrud. For the study of water conservation awareness, an interview session is conducted and the questionnaires distributed randomly to 400 students in colleges such as Kolej Zamrud, Kolej Baiduri and Kolej Mutiara. Generally the questionnaires were distributed by the author to every college by hand and respondents will answer the questions on the spot. The aspects that have been observed are to identify the level of conservation and the way they using the water. Otherwise, this is to generate a good attitude among them. The data obtained been analyzed by using Microsoft Excel software and SPSS windows version 7.5. In water quality study, samples were taken from water tank and tap from each level in Kolej Zamrud at UiTM Pulau Pinang. The laboratory test on water quality was conducted. The samples were taken 3 times every week in one month duration, started from February 16, 2005 until March 10, 2005. Each sample taken was tested to determine the values of pH, SS, conductivity and BOD. The comparison were made between the result obtain with the standard quality of water. It is expected that the result fullfill the National Standard for Drinking Water. Suggestion and recommendation will be made from this study.

Keyword: Water conservation, water quality, BOD₅, pH, suspended solid (SS).