



**UNIVERSITI TEKNOLOGI MALAYSIA
FAKULTI SAINS**

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**TEST
SEMESTER II SESSION 2013/2014**

CODE : SSCU 3623

**COURSE : RESEARCH METHODOLOGY AND DATA
RETRIEVAL**

LECTURER : DR ZUHAILA ISMAIL

PROGRAM : FS

DATE : 30 APRIL 2014

DURATION : 1 HOUR 30 MINUTES

**INSTRUCTION : ANSWER ALL THE QUESTIONS IN THE ANSWER
BOOKLET PROVIDED**

(THIS QUESTION PAPER CONSISTS OF 4 PRINTED PAGES INCLUDING THIS PAGE)

QUESTION 1 (2 MARKS)

What is a research proposal?

QUESTION 2 (8 MARKS)

What are the components of a research proposal?

QUESTION 3 (6 MARKS)

Rewrite the list of references below based on UTM thesis manual reference style:

[1] Zuhaila Ismail, Alistair David Fitt, Colin Peter Please, A fluid mechanical explanation of the spontaneous reattachment of a previously detached Descemet membrane, 2013, *Mathematical Medicine and Biology*, 30(4), 339 – 355.

[2] Nursalasawati Rusli, Computational modelling and simulation of biomagnetic fluid flow in a stenotic and aneurismal artery, Doctor Philosophy, Universiti Teknologi Malaysia, Johor, 2013.

[3] Mohd Nor Mohamad, Ismail Kamis, 2012, *Advance Calculus*, 10th edition, New York, Prentice Hall.

QUESTION 4 (24 MARKS)

Read the journal article provided in next pages. Write a research framework (background, problem statement, objectives, scope and significance of study) using information from the journal article and your background knowledge.