IMPROVISED QIBLA DIRECTION FORMULA BY *VEC-M*

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Tuan,

LAPORAN AKHIR PENYELIDIKAN 'IMPROVISED QIBLA DIRECTION FORMULA BY *VEC-M'*

Merujuk kepada perkara di atas, bersama-sama dengan ini disertakan 1 salinan CD dan 3 naskhah Laporan Akhir Penyelidikan bertajuk 'Improvised Qibla Direction Formula By *Vec-M'* dari Fakulti Sains Komputer & Matematik, UiTM Pulau Pinang untuk makluman pihak tuan.

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Yang benar,

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5.2 Enhanced Executive Summary

Qibla is a most important direction which is needed to alive as well as to dead. Every Muslim has to face this direction five times a day to perform his obligatory prayer. Facing this direction is necessary condition for the prayer's validity. The qibla is the direction to Kaabah, but what precisely is that direction? A classical definition for determination of qibla direction is given by Ibn al-Haytham:

"the qibla is the direction such that when a human observer faces it, it is as if he is looking at the diameter of the earth passing through the Kaabah"

Here, we proposed new technique called Vector Method [*Vec-M*] for determining qibla direction. The problem of determining the direction of qibla is a problem of mathematical geography. Thus, this project describes about the methods of the mathematical calculation of qibla by using modern approach. Methods discuss are Spherical Trigonometry Method and Vector Method. The accuracy of the proposed method were compared. Besides, the discussion is confined to the scientific aspects of the subject and the religion rulings are analyzed only for an underlying scientific assumption and also for knowledge purposes.

"And Allah knows best, and He is most wise"