## 國立清華大學 107 學年度碩士班考試入學試題

系所班組別:歷史研究所乙組

考試科目(代碼):西方科技史(3202)

共 1 頁 , 第 1 頁 \*請在【答案卷、卡】作答

- 一、 自古希臘時期起, 西方的科學發展史就有一門名為自然哲學 (natural philosophy)的學科, 請就你所知說明這門學科的研究範 圍與其他學科有何不同, 並舉出歷史的實例來說明某一代表性 自然哲學的著作,以及其大要。 (34%)
- 二、亞里斯多德自然哲學認為「自然討厭真空」,這樣的說法從何而來? 而伽利略(Galileo Galilei, 1564-1642)對於真空的解釋是什麼?他的徒孫 Evangelista Torricelli(1608-1647)又如何解釋真空?請利用這樣的理論轉變,來說明當時西方物理科學正在經歷的轉變為何。(33%)
- (1) Copernicus, Galileo, and Newton made important contributions to the development of science. Choose one scholar out of these three and briefly explain what exactly were his main scientific achievements. (2) The philosopher of science T. Kuhn published his famous book *The Structure of Scientific Revolutions* in 1962. What is a "Scientific Revolution", according to Kuhn? (If you don't remember Kuhn's definition, give your own definition of "Scientific Revolution" and briefly explain it.) (3) Explain how exactly the activities of the scholar selected by you (Copernicus, Galileo or Newton) correspond to the definition of "Scientific Revolution" that you provided? (33%)