

國 立 清 華 大 學 命 題 紙

98 學年度 歷史所 乙 組碩士班入學考試

科目 中國科技史 科目代碼 3201 共 1 頁第 1 頁 *請在【答案卷卡】內作答

一、在薩爾滸之役被後金俘虜的朝鮮官員李民寔，曾於〈建州聞見錄〉一文中反省兩軍的優劣曰：

近來軍器造作……皆有名無實甲冑則不堅不密重且齟齬弓矢刀槍則歪弱鈍弊不堪射刺砲銃則四五放多有毀裂者……臣觀奴賊遠技不過弓矢而皮弦木箭所及不過六七十步之間惟以鐵騎奔馳衝突蹂躪無不潰敗若以勁弓利鏃制之於百步之外則可以挫其鋒矣至於鳥銃極是遠技而藏放甚遲若非憑城據險則難以措手……上年我軍專恃砲手當其衝突未及再藏而賊騎已入陣中矣賊之甲冑極其堅緻除非強弓必不能貫穿於百步之外。

其中「砲手」一詞乃為朝鮮之特殊用語，專指鳥銃手。(1) 請將前引文抄寫並詳加標點。(2) 請據以說明為何使用冷兵器的後金軍隊可以戰勝使用鳥銃的朝鮮軍隊。(34%)

二、In his works the famous British historian of Chinese science J. Needham stated that Daoism (道教/道家) played a positive role in the development of science in China. This hypothesis was later criticized by other historian of science, in particular, by the American historian N. Sivin. Sivin investigated a number of biographies of famous Chinese scientists and demonstrated that they did not have any connections with Daoism. (可用中文或英文作答，33%)

(1) Try to find at least one example to defend the position of J. Needham (provide as many details as necessary to make your example convincing);

(2) Try to find more arguments to support the position of N. Sivin;

(3) Do you think that other religious and/or philosophical movements influenced positively or negatively the development of science in China? Provide at least two examples.

(4) Suggest your own methodology to investigate the question of the relationship between science and religion in China.

三、一本中國科學史著作記載著下述資料：

地形既圓水抱地氣抱水火抱氣與星月諸天層層相抱必渾為圓不然則重重相接之間容有虛罅豈理也哉……若將山河海陸渾作一丸而看隨人所戴履處處是高四面處處是下所謂天地無處非中也……宋儒言天旋如磨[磨]下許多粉子凝結為地可一大噓又言海那一岸與天相粘皆屬管中之窺。

(1) 請抄錄前引文並加以標點；(2) 請就你所知，從其可能的歷史背景來分析其內容的要點，以及它們在那個時代的科學史(如中西交流史、自然哲學等方面)意義。(33%)