

國立清華大學 106 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）：中國科技史（3001）

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*請在【答案卷、卡】作答

一、許多學者將近代中國科技落後歸咎於「科舉制度」的施行。請論述對這個觀點的看法，並分析科舉制度是否對中國科學、技術發明與推廣產生直接或間接的影響？亦即該制度對哪些知識與技術的發展較有成效？對科技發展是否有負面的影響？(34%)

二、以下一段文字是西漢淮南王劉安及其幕下賓客所合撰的《淮南子》的〈天文訓〉，請討論。(33%)

天墜未形，馮馮翼翼，洞洞濶濶，故曰太昭。道始生虛廓，虛廓生宇宙，宇宙生氣。氣有涯垠，清陽者薄靡而為天，重濁者凝滯而為地。清妙之合專易，重濁之凝竭難，故天先成而地後定。天地之襲精為陰陽，陰陽之專精為四時，四時之散精為萬物。積陽之熱氣生火，火氣之精者為日；積陰之寒氣為水，水氣之精者為月；日月之淫為精者為星辰，天受日月星辰，地受水潦塵埃。

昔者共工與顓頊爭為帝，怒而觸不周之山。天柱折，地維絕。天傾西北，故日月星辰移焉；地不滿東南，故水潦塵埃歸焉。天道曰圓，地道曰方。方者主幽，圓者主明。明者，吐氣者也，是故火曰外景；幽者，含氣者也，是故水曰內景。吐氣者施，含氣者化，是故陽施陰化。天之偏氣，怒者為風；地之含氣，和者為露。陰陽相薄，感而為雷，激而為霆，亂而為霧。陽氣勝則散而為雨露，陰氣盛則凝而為霜雪。

三、The famous historian of Chinese science J. Needham (1900-1995) stated that the development of science in China was stimulated by Daoist philosophy. Later, Nathan Sivin (b. 1931) claimed that there was no relationship between science and Daoism in China.

1. What are the arguments that can be used to support Needham's claim? (If you are familiar with Needham's arguments, briefly present them and evaluate them critically; if you are not familiar

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with them, present your own arguments to support his idea);

2. What are the arguments that can be used to support Sivin's claim? (If you are familiar with Sivin's arguments, briefly present them and evaluate them critically; if you are not familiar with them, present your own arguments to support his idea).
3. What is your own opinion concerning the connections between science and religion in China ("religion" here can mean Daoism, Buddhism, or Confucianism)? Provide arguments to support your viewpoint.

(3 小題，共 33%)

(完)