

1. 中翻英（每小題各 5 分）：

- (1) 研究顯示婦女每增加十倍血鉛濃度則降低百分之三十懷孕之機率。
- (2) 高危險群婦女在使用乳房攝影術(Mammography)後額外加入超音波(Ultrasound)，其成效為於每 1000 個婦女可以多偵測七個乳癌，但同時也增加偽陽性個案(false positives)。
- (3) DDT 在第二次大戰前期被發現是對抗蚊蟲叮咬相當有效之神奇且多種使用方法之化學物質。
- (4) 據統計住在台灣高山產黃蛋之青蛙數量已減少僅至 2000。
- (5) 有關計畫至日本旅遊之事我完全被蒙在鼓裡。

2. 英翻中（每小題各 5 分）：

- (1) When the results of certain small antecedent studies are controversial it is imperative to conduct a large-scale study to throw light on the truth.
- (2) Coherent property cannot be overemphasized while it comes to writing up the manuscript in the province of academic research.
- (3) Your methodology is so desultory, not to speak of the finding.
- (4) It is the life style that is responsible for the control of blood pressure level.
- (5) Those who had the habit of smoking had 2-fold risk for cardiovascular disease compared with those who had not according to a recent study.

3. 在統計分析，若擬說檢定(hypothesis testing)的結果顯著，稱為統計學上的顯著，但在科學實務研究，統計學上的顯著並不一定就具有科學上顯著的意義。請先將以上文字譯成英文，再闡述這段文字的背後意義。（註：闡述過程必須提及到檢定的正確性）（25 分）

4. 請以英文回答以下問題。

「The estimation of the population mean by the sample mean is a typical example of the type of statistical inference known as point estimation. It is of limited values unless supplemented by other devices. Please summarize some important attributes that may be required for an estimator.」（25 分）