

I. 閱讀測驗 (40%)

The Brown Dog Affair

by Kaushik Patowary | Amusing Planet

In a secluded spot near the Old English Garden, in London's Battersea Park, is a small bronze statue of a terrier. The statue was erected in 1985, but the one that it replaced—the original statue—was the subject of much political and scientific contention, resulting in riots and demonstrations that raged for seven years and divided the entire nation.

The controversy began in December 1902, when an anonymous brown dog was subjected, over the course of several months, to repeated live surgeries in a laboratory of University College London. The dog was cut open, allegedly without anesthesia, and his pancreas removed, and for the next two months, confined to a cage where it howled and whined upsetting several staff of the college.

The final act was performed in February 1903 in a lecture room before a group of medical students. The dog was stretched on his back on the operating table, and was cut open to inspect the result of the first operation. The wound was then clamped shut with forceps and the animal handed over to another researcher who punctured a new wound in the neck of the animal. The exposed nerves on the neck were then stimulated with electricity in an attempt to prove that salivary pressure was independent of blood pressure. After half an hour of trying, the experiment was deemed a failure and abandoned. The terrier was then handed to a student who ended the miserable dog's sufferings by driving a knife to his heart.

In attendance that day were two Swedish women and anti-vivisectionists who had enrolled themselves as students in order to document such incidents. The same year, the women published a book titled *The Shambles of Science: Extracts from the Diary of Two Students of Physiology*, where they exposed the researchers' cruel methods.

The book came to the attention of Stephen Coleridge, secretary of the National Anti-Vivisection Society, who realized that two anti-cruelty laws had been broken in the animal's handling—he had not been anesthetized, and he had been used in more than one experiment. When Coleridge publicly lashed out against the scientists, William Bayliss, one of the professors involved in the vivisection of the dog, sued Coleridge for libel.

Although Coleridge lost the suit, the publicity surrounding the trial brought the 'Brown Dog Affair' vividly to the public's attention.

In 1906, a benefactor provided the funds to erect a memorial statue in Battersea's Latchmere Recreation Ground, not far from where the current statue stands. The statue depicted a dog sitting upright on top of a cylindrical drinking fountain, which had separate drinking troughs for both humans and animals. The statue bore a plaque that said:

"In Memory of the Brown Terrier Dog Done to Death in the Laboratories of University College in February 1903 after having endured Vivisection extending over more than Two Months and having been handed over from one Vivisector to Another Till Death came to his Release.

Also in Memory of the 232 dogs Vivisected at the same place during the year 1902.

Men and Women of England how long shall these Things be?"

見背面

Medical students in London were angered by the plaque, because of the accusatory nature of the inscription. They repeatedly attacked the memorial and protested against it. In November and December, 1907, thousands of medical students rioted in the streets, burnt effigies, and made more attempts at attacking the statue requiring the city to use police force to control the crowd. Many students were arrested and fined, and round-the-clock guards were placed to protect the statue. Eventually the council got tired of the controversy and the need for policing the memorial which was costing the city too much. On March 10, 1910, the statue was quietly removed under the cover of darkness. 3,000 anti-vivisectionists protested in Trafalgar Square and demanded that the statue be returned but to no avail.

Seventy-five years later, the National Anti-Vivisection Society and the British Union for the Abolition of Vivisection commissioned a new statue and placed it in Battersea Park. It bears the same inscription as the original, although there is no drinking fountain this time.

1. 請簡述文中的無名黃狹犬在 1902 年 12 月到 1903 年 2 月間，被進行那些實驗與教學示範，因而引爆了這起涉政治、科學爭論的事件。(10%)
2. 在無名黃狹犬所進行的這些實驗與教學示範過程中，有哪 2 項違背法令的做法？此事件如何被揭露給大眾？(10%)
3. 事件何被揭露後，大眾贈豎立黃狹犬紀念銅雕像與牌匾文於倫敦 Battersea 公園，請中文翻譯該牌匾文。(10%)
4. 當時倫敦的醫學生對該牌匾文內容的反應為何？為什麼？(10%)

II. 中翻英 (30%)

動物實驗的目標，是在動物身上模擬或複製人的生理與疾病狀況，以便瞭解疾病產生原因與研發相關治療策略。所以動物實驗對人類醫學的進步有著密不可分的關係，而使用動物來進行生物醫藥研究也無法完全避免，因此為保障動物福祉，每個進行動物實驗的研究人員必須要完全了解及遵守動物實驗倫理基本規範。

III. 配合填空：將下列 a-o 的單字、專有名詞或片語依前後文意填入下面兩段科學短文中的 1-15 空格中 (30%)

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|---------------|-----------------|------------------|
| a. accurately | b. architecture | c. astronomy; |
| d. coherent | e. derived | f. fundamentals |
| g. inevitable | h. lasting | i. least squares |
| j. of little | k. quality | l. quantitative |
| m. subsequent | n. sound | o. statistics; |

Micrographs are 1. _____ scientific value unless the investigator can interpret them 2. _____. Interpretation skills come from experience and a 3. _____ background in the 4. _____ of cell structure and tissue 5. _____. The amount of information one is capable of obtaining from a micrograph also depends on the 6. _____ of the micrograph. Mistakes made in an electron microscope laboratory in tissue preparation and sectioning are 7. _____ and will be reflected in the 6. _____ of the final electron micrograph.

The origin of modern statistics can be traced back to the 17th century, when it 8. _____ from two sources. The first of these related to political science and developed as a 9. _____ description of the various aspects of the affairs of a government or state (hence the term statistics). 10. _____ stimulus for the development of 11. _____ came from the science of 12. _____, in which many individual observations had to be designed into a 13. _____ theory. Many of the famous astronomers and mathematics of the 18th century, such as Pierre-Simon de Laplace in France and Carl Friedrich Gauss in Germany were among the leaders in this field. Gauss's 14. _____ contribution to the field is the development of 15. _____.

試題隨卷繳回