

大同大學 97 學年度研究所碩士在職班入學考試試題

考試科目:科技英文

所別:生物工程研究所

第(全)頁

註:本次考試 不可以參考自己的書籍及筆記; 不可以使用字典; 不可以使用計算器。

請將下列英文翻譯成中文，寫在答案本上。每題25分。

- (1) Devices that help the heart to function are one of the most fruitful areas for patients, caregivers, and companies. Whether implantable or external, electronic or mechanical, heart devices are becoming smaller and easier to implant. They are restoring quality of life to patients who would have had little hope a few years ago. For example, pacemaker (心律調節器) is capable to modify the heart rhythm with a patient's activity level and helps to maintain his normal lifestyle.
- (2) Early miniaturized (微型化) devices were often fabricated in silicon or glass; however, the fabrication processes were usually expensive and cumbersome. Polymeric materials become attractive alternatives because of their low cost and simple fabrication process, and poly(dimethylsiloxane) (PDMS, 聚二甲基矽氧烷) receives most attention because it is chemically stable, optically transparent, and biocompatible.
- (3) Although genetically modified organisms (GMOs)(基因改造生物) in agriculture have been available only for a few years, their commercial use is expanding rapidly. GM crops(作物) in widespread use include corn, soybeans, cotton, potatoes, and rape(油菜). Most GMO crops are grown in North America, but large areas of cultivation(栽培) are found in Argentina, Mexico, and South Africa.
- (4) Avian influenza viruses (禽流感病毒) do not usually infect humans, although several cases of human infection with bird influenza viruses have occurred since 1997. Avian influenza viruses may be transmitted to humans in two main ways: (1) directly from birds or from avian virus-contaminated (污染)environments to people or (2) through an intermediate host, such as a pig. Pigs are an important carrier because they can be infected with both human and avian flu and also come into contact with both species.