

大同大學 九十 學年度研究所碩士在職專班入學考試試題

考試科目：科技英文

所別：生物工程研究所

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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。

請將下列句子翻成中文

1. The Human Genome Project is a collaborative¹ international, government- and private-sponsored effort to map and sequence the entire human genome, some 3 billion base pairs distributed among the two sex chromosomes (X and Y) and 22 autosomes (chromosomes that are not sex chromosome). Initial work identified and mapped at least 3000 genetic markers (genes or other recognizing loci on the DNA), evenly distributed throughout the chromosomes at roughly 100-kb intervals. At the same time, determination of the entire nucleotide sequence of the human genome began. The target date for completion is 2003. (50%)
2. What is biotechnology? It is the industrial use of living organisms or biological techniques developed through basic research, which modifies human health or the human environment. Biotechnology product includes antibiotics, insulin, interferon recombinant DNA and techniques such as recycling. The key to modern biotechnology is the manipulation of DNA. In 1953, James Waston and Francis Crick's discovered the structure of DNA. Thereafter, DNA became the protagonist² of biotechnology. Nowadays, modern people are searching for methods to cure diseases and make people live longer. They are developing medicines and modifying plants or animals to solve human's problems and to improve human's quality of life. Biotechnology also provides the technology used for bioremediation, employing bacteria to eat industrial waste and turn it into harmless products. (50%)
(¹共同研究；²主角)