

大同大學 九十一 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。

1. Biotechnology is an interdisciplinary subject; its practice requires cooperation between the scientist, the engineer and the economist, combined with an understanding of problems that can arise in the different fields. The approaches taken by each of the specialists in dealing with the problems obviously vary, and this involve that a willingness to learn techniques both simple and complicated in an unfamiliar field are essential. (30%)
2. Because science has been so successful in increasing knowledge, many philosophers and historians have tried to describe how scientists work. One description of the way scientists work is the scientific method, a set of formal rules for expressing, testing, and eliminating ideas. In reality, scientists do not think of themselves as following the rules of this or any other single "method." Rather, they pursue knowledge in a variety of individual and creative ways. Nonetheless, we can give a general description of how most scientists go about learning about the world. (40%)
3. The aim of the science of biochemistry is to explain life in molecular terms, because we now realize that there is no fundamental difference between living matter and nonliving matter. Modern biochemistry draws on knowledge from chemistry, cell biology, and genetics and uses techniques borrowed from physics. Discoveries in all of these sciences have contributed to the development of a true molecular biology. (30%)