國立陽明大學 98 學年度研究所碩士班暨碩士在職專班
招生考試筆試試題

所組別：科技與社會研究所

科目：英文閱讀與理解　　請勾選：V碩士班 □碩士在職專班

★說明：以下四題為翻譯題（英翻中）。若時間不足，請就各題內容儘量說明與解釋。

1. Technological systems contain messy, complex, problem-solving components. They are both socially constructed and society shaping. Among the components in technological systems are physical artifacts, such as the turbogenerators, transformers, and transmission lines in electric light and power systems. Technological systems also include organizations, such as manufacturing firms, utility companies, and investment banks, and they incorporate components usually labeled scientific, such as books, articles, and university teaching and research programs. (25%)

（From Thomas P. Hughes, 'The Evolution of Large Technological Systems,' In Wiebe Bijker, Thomas P. Hughes, and Trevor Pinch eds., *The Social Construction of Technological Systems,* 1989)

2. [T]he disjunction between expert and lay knowledge cannot be reduced to a mere information gap between experts and the general public as envisaged by the deficit model. Lay knowledge is not an impoverished or quantitatively inferior version of expert knowledge; it is qualitatively different. Factual information is only one ingredient of lay knowledge, in which it interweaves with other elements (value judgements, trust in the scientific institutions, the person's perception of his or her ability to put scientific knowledge to practical use) to form a corpus no less sophisticated than specialist expertise. (25%)

（From Massimiano Bucchi and Federico Neresini, 'Science and Public Participation,' In Edward J. Hackett et al. eds. *The Handbook of Science and Technology Studies*, 3rd edition. Cambridge, Mass.: MIT Press, 2008）

3. It is fairly common for those who voice concerns about the social, economic, and environmental consequences of technological change to be denounced as irrational, unscientific and even anti-technology. Thus, Rachel Carson's modest report in *The Silent Spring* about the environmental destruction caused by the use of chemical pesticides brought heated denials from the chemical industry and attacks on Ms. Carson's scientific credentials (even though she was a noted scientist) and flagrant efforts to destroy her reputation. Of course, we now think of Rachel Carson as a hero, one able to focus our society's awareness of environmental problems and solutions. But as she raised her voice, calling our attention to the consequences of spreading poisons through the environment, she was derided as ill-informed, an enemy of progress. (25%)

（From Langdon Winner's testimony to the Committee on Science of the U.S. House of Representatives on The

Societal Implications of Nanotechnology, Wednesday, April 9, 2003）

4. We have to remember that medicine is not one thing but two: medicine is a science, like other sciences, but it is also a source of succor—a source of relief or assistance in times of distress. The two faces of medicine often conflict. One dimension of that conflict is urgency: medicine as science has to try to get things right however long it takes, but medicine as succor has to provide an answer here and now. A related dimension is the 'unit of suffering': though the science of medicine does little for the life expectancy of populations as a whole, it still makes perfect sense for each of us as individuals to reach out for the succor that medicine might provide in moments of distress. (25%)

（From Harry Collins and Trevor Pinch, *Dr. Golem: How to Think about Medicine*. Chicago: University of Chicago Press, 2005）