

科目 英文(含文獻評析) 科目代碼 5003, 5102 共 7 頁第 1 頁 *請在試卷【答案卷】內作答

一、請將以下名詞翻譯為英文：(每題二分) (20%)

1. 電子商務
2. 數位電視
3. 商標權
4. 仲裁
5. 智慧財產權
6. 最惠國待遇
7. 非政府組織 (全稱)
8. 默認
9. 產品責任
10. 原住民

二、請在閱讀以下文章後，以中文回答問題：(25%)

Harvard University president Lawrence Summers has suffered acrimonious condemnation, and may have jeopardized his job, for suggesting that the underrepresentation of women in engineering and some scientific fields may be due in part to inherent differences in the intellectual abilities of the sexes.

But Summers could be right.

Some scholars who are in the know about the differences between men's and women's brains believe his remarks have merit.

"Among people who do the research, it's not so controversial. There are lots and lots of studies that show that men's and women's brains are different," says Richard Haier, a professor of psychology in the pediatrics department of the University of California Los Angeles medical school.

Academia has been bitterly divided in recent years by the nature vs. nurture debate, and the Harvard president's comments last month at a National Bureau of Economic Research symposium squarely address aspects of that dispute that are so controversial the opposing sides almost never discuss them.

On one side are those who believe the sexes are equal enough in their intellectual abilities that any biological difference between them is vastly outweighed by social pressures and discrimination that discourage girls and women from pursuing science and engineering.

"When people hear 'biology' they think there's nothing you can do about it," says Joshua Aronson, a professor of applied psychology at New York University. "It's in that context that Summers' remarks are not helpful."

On the other side are those who believe that biological differences between men and women really can account for at least some of the underrepresentation of women in engineering and some fields of science.

"I think it's an outrage that certain questions - that real, important questions - can't be raised in an academic atmosphere, that research that's well-known can't be presented without some sort of hysterical response," says Linda Gottfredson, a psychologist at the University of Delaware.

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In recent years, scientists have found that male and female brains are wired differently from one another, due to the role of testosterone and other male hormones during gestation. Brains growing under the influence of male hormones are slightly larger and have denser concentrations of neurons in some regions.

Male brains also contain a greater proportion of grey matter, the part of the brain responsible for computation, while women have relatively more white matter, which specializes in making connections between brain cells.

Brain-imaging studies suggest that both sexes exploit these differences to their benefit. UCLA researchers have done brain scans of men and women who scored in the top one per cent on the math section of the SAT. As they worked on math problems, the men relied heavily on the grey matter in the brain's parietal and cerebral cortices. Women showed greater activity in areas dominated by the well-connected white matter.

"Maybe they're doing the math using the white matter," Haier says. "It's not completely unreasonable."

So men and women appear to use their brains differently in some situations. Does that make any difference in how smart they are?

The short answer is no. Average IQ is the same among men and women.

But it's the long answer, which considers different kinds of cognitive ability and speculates about how they are distributed among individuals in the two sexes, that has been raised in support of Summer's remarks.

Intelligence tests have found that men, on average, perform better on spatial tasks that require mentally rotating or otherwise manipulating objects. Men also do better on tests of mathematical reasoning. Women tend to do better than men on tasks requiring verbal memory and distinguishing whether objects are similar or different. The relative strengths even out, so on average the sexes are of equal intelligence.

Some studies also have suggested that the IQ distribution is more spread out among men. If that is true, then there are proportionately more men at the extremely brilliant end of the IQ scale - and the dull end as well.

So the reasoning goes like this: Fields such as physics require superb mathematical ability. Not just above average, but really out there.

If men do have a slight advantage over women in mathematical ability, as much of the current research suggests, and there are more men at the extreme ends of the intelligence spectrum, that suggests there is a larger pool of men who can do the heavy intellectual lifting physics requires.

But is the difference really biological, or are exceptional girls and women intimidated by cultural stereotypes and discouraged from cultivating their talents from an early age?

"If I had to guess, the real reason for the lack of women in the upper strata is that there's a comfort zone when you walk into a classroom and see a certain number of people like you," Aronson says.

Female physicists and engineers almost always live their entire professional lives outside that comfort zone. Aronson and his colleagues have shown that many of the performance differences between men and women, and also between different races, can be erased with minor adjustments that influence test takers' confidence.

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Tell a group of girls before a math exam that the test does not detect gender differences in mathematical ability and their scores increase. Tell white men before a similar exam that their scores are going to be compared to those of Asians and their scores drop simply because they think they won't measure up.

"This suggests there's something about the testing situation itself," Aronson says. "If there is a biological difference, then it's one that's awfully easy to overcome."

Whatever the reason, researchers have found differences in math ability between males and females from pre-kindergarten through adulthood.

Vanderbilt University psychologists who have been giving exceptionally bright 12-to 14-year-olds the SAT for more than 20 years have found that boys do exceptionally well on the math side of the exam. In a sample of 40,000 children who took the test, twice as many boys as girls scored above 500, four times as many boys scored above 600 and 13 times as many topped 700. The sexes were equally matched on the verbal portion of the test, which is scored on a scale of 200 to 800.

That would suggest there are differences between the sexes in innate ability, the Vanderbilt researchers have concluded in various scientific papers.

Though they declined to be interviewed about Summers' comments, members of the Vanderbilt group offered another possible explanation for the shortage of women in engineering, physics and related fields in the November 2000 issue of Psychological Science.

The psychologists followed up with one group of exceptionally talented people 20 years after they had taken the SAT. Male or female, all of the subjects had scored well enough on the test to handle just about any career they chose.

At the age of 33, fewer of the women had pursued careers in physics, engineering, computer science and related fields. But the women outnumbered the men in medicine, social sciences and the humanities. And the two sexes had earned advanced degrees at about equal rates, which suggests that although women may have been steered away from certain fields by biology, discrimination or a lack of role models, they had not simply dropped out but had fully achieved their potential in the fields they did pursue.

"Although equally achieving educationally," the Vanderbilt researchers wrote, "these men and women appear to have constructed satisfying and meaningful lives that took somewhat different forms." (資料來源：Feb. 27, 2005, CTV.CA, The Bell Globemedia Inc.)

問題 壹：哈佛校長日前發表該等言論，引發極大之爭議。請大量引用本文論述，並提出你個人之看法。(請引用本文論點以支持你的看法；亦請反駁不同觀點)。(25%)

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三、請在閱讀以下文章後，以中文回答問題：(15%)

IBM today pledged open access to key innovations covered by 500 IBM software patents to individuals and groups working on open source software. IBM believes this is the largest pledge ever of patents of any kind and represents a major shift in the way IBM manages and deploys its intellectual property (IP) portfolio.

The pledge is applicable to any individual, community, or company working on or using software that meets the Open Source Initiative (OSI) definition of open source software now or in the future.

IBM intends for this pledge to form the basis of an industry-wide "patent commons" in which patents are used to establish a platform for further innovations in areas of broad interest to information technology developers and users.

Also today, the United States Patent and Trademark Office (USPTO) has released its annual list of the top patentees. With 3,248, IBM earned more U.S. patents than any other company for the twelfth consecutive year. IBM had 1,314 more patents than any other company. This is the fourth consecutive year IBM has received more than 3,000 U.S. patents and remains the only company to receive more than 2,000 patents in one year.

While IP ownership is an essential driver of innovation, technological advances are often dependent on shared knowledge, standards, and collaborative innovation. IBM's IP framework enables both while protecting truly new, novel and useful inventions. Open standards can accelerate the interoperability and expansion of the global infrastructure.

"True innovation leadership is about more than just the numbers of patents granted. It's about innovating to benefit customers, partners and society," said Dr. John E. Kelly, IBM senior vice president, Technology and Intellectual Property. "Continuing IBM's legacy of leadership in the strategic use of intellectual property, our pledge today is the beginning of a new era in how IBM will manage intellectual property to benefit our partners and clients. Unlike the preceding Industrial Economy, the Innovation Economy requires that intellectual property be deployed for more than just providing the owner with freedom of action and income generation."

Open source software, based on collaborative innovation among developers around the world, is gaining significant marketplace momentum. IBM believes the patents it is opening up to open source developers will help foster continued innovation. They also can contribute to open standards and broader interoperability between applications by providing open source developers with a solid base of innovation they can use and share.

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At LinuxWorld in August, IBM pledged not to assert any of its patents against the Linux kernel. Today's pledge covers thousands of open source projects and programs.

"This is not a one-time event," said Dr. Kelly. "While IBM will continue to demonstrate leadership in patent output, through measures such as today's pledge, we will increasingly use patents to encourage and protect global innovation and interoperability through open standards and we urge others to do so as well. We will work with the USPTO and other commentators and policy makers to ensure that the U.S. patent system continues to evolve to address the challenges of the Innovation Economy"

問題 壹：請依據本文，簡述 IBM 開放 500 件美國專利原始碼之原因。(8%)

問題 貳：請以本文為基礎，提出你個人對於原始碼開放的看法。(7%)

四、請在閱讀以下文章後，以中文回答問題 (20%)

It is true that one of the essential sticks in the bundle of property rights is the right to exclude others. And here there has literally been a "taking" of that right to the extent that the California Supreme Court has interpreted the State constitution to entitle its citizens to exercise free expression and petition rights on shopping center property. But it is well established that "not every destruction or injury to property by governmental action has been held to be a 'taking' in the constitutional sense." Rather, the determination whether a state law unlawfully infringes a landowner's property in violation of the Taking Clause requires an examination of whether the restriction on private property "forc[es] some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." This examination entails inquiry into such factors as the character of the governmental action, its economic impact, and its interference with reasonable investment-backed expectations. When "regulation goes too far, it will be recognized as a taking."

Here the requirement that appellants permit appellees to exercise state-protected rights of free expression and petition on shopping center property clearly does not amount to an unconstitutional infringement of appellants' property right under the Taking Clause. There is nothing to suggest that preventing appellants from prohibiting this sort of activity will unreasonably impair the value or use of their property as a shopping center. The

PruneYard is a large commercial complex that covers several city blocks, contains numerous separate business establishments, and is open to the public at large. The decision of the California Supreme Court makes it clear that the PruneYard may restrict expressive activity by adopting time, place, and manner regulations that will minimize any interference with its commercial functions. Appellees were orderly, and they limited their activity to the common areas of the shopping center. In these circumstances, the fact that they may have "physically invaded" appellants' property cannot be viewed as determinative.

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This case is quite different from *Kaiser Aetna v. United States*. *Kaiser Aetna* was a case in which the owners of a private pond had invested substantial amounts of money in dredging the pond, developing it into an exclusive marina, and building a surrounding marina community. The marina was open only to fee-paying members, and the fees were paid in part to "maintain the privacy and security of the pond." The Federal Government sought to compel free public use of the private marina on the ground that the marina became subject to the federal navigational servitude because the owners had dredged a channel connecting it to "navigable water."

The Government's attempt to create a public right of access to the improved pond interfered with Kaiser Aetna's "reasonable investment backed expectations." We held that it went "so far beyond ordinary regulation or improvement for navigation as to amount to a taking. . . .". Nor, as a general proposition, is the United States, as opposed to the several States, possessed of residual authority that enables it to define "property" in the first instance.

問題 壹、請說明這篇文章的要點。(10%)

問題 貳、請翻譯上面畫底線句子為中文。(10%)

五、閱讀下面文章並以中文回答問題(20%)

The historical rule that a permanent physical occupation of another's property is a taking has more than tradition to commend it. Such an appropriation is perhaps the most serious form of invasion of an owner's property interests. To borrow a metaphor, the government does not simply take a single "strand" from the "bundle" of property rights: it chops through the bundle, taking a slice of every strand.

Property rights in a physical thing have been described as the rights "to possess, use and dispose of it." To the extent that the government permanently occupies physical property, it effectively destroys each of these rights. First, the owner has no right to possess the occupied space himself, and also has no power to exclude the occupier from possession and use of the space. The power to exclude has traditionally been considered one of the most treasured strands in an owner's bundle of property rights. Second, the permanent physical occupation of property forever denies the owner any power to control the use of the property; he not only cannot exclude others, but can make no non-possessory use of the property. Although deprivation of the right to use and obtain a profit from property is not, in every case, independently sufficient to establish a taking, it is clearly relevant.

Finally, even though the owner may retain the bare legal right to dispose of the occupied space by transfer or sale, the permanent occupation of that space by a stranger will ordinarily empty the right of any value, since the purchaser will also be unable to make any use of the property.

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Moreover, an owner suffers a special kind of injury when a stranger directly invades and occupies the owner's property. Property law has long protected an owner's expectation that he will be relatively undisturbed at least in the possession of his property. To require, as well, that the owner permit another to exercise complete dominion literally adds insult to injury. Furthermore, such an occupation is qualitatively more severe than a regulation of the use of property, even a regulation that imposes affirmative duties on the owner, since the owner may have no control over the timing, extent, or nature of the invasion.

The traditional rule also avoids otherwise difficult line-drawing problems. Few would disagree that, if the State required landlords to permit third parties to install swimming pools on the landlords' rooftops for the convenience of the tenants, the requirement would be a taking. If the cable installation here occupied as much space, again, few would disagree that the occupation would be a taking. But constitutional protection for the rights of private property cannot be made to depend on the size of the area permanently occupied. Indeed, it is possible that, in the future, additional cable installations that more significantly restrict a landlord's use of the roof of his building will be made.

Finally, whether a permanent physical occupation has occurred presents relatively few problems of proof. The placement of a fixed structure on land or real property is an obvious fact that will rarely be subject to dispute. Once the fact of occupation is shown, of course, a court should consider the extent of the occupation as one relevant factor in determining the compensation due.

問題 壹、請說明這篇文章的要點。(10%)

問題 貳、請翻譯上面畫底線句子為中文。(10%)