

東吳大學 106 學年度碩士班研究生招生考試試題

第 1 頁，共 2 頁

| | | | |
|----|--------|------|--------|
| 系級 | 哲學系碩士班 | 考試時間 | 100 分鐘 |
| 科目 | 邏輯 | 本科總分 | 100 分 |

※請標明題號後，依序作答於答案卷上。

一、檢驗下面的語句是套套句(tautology)： 10%

如果我註定會賺大錢，那麼，只要我努力工作，我就註定會賺大錢。

(A：「我註定會賺大錢」；B：「我努力工作」。)

二、證明下面論證有不一致的前提： 10%

1. $\sim P \vee Q$

2. P

3. $Q \supset \sim P \quad / \therefore Q$

三、用規則證明下列論證（從前提推導出結論）： 30%

1. 1. $(A \cdot B) \vee C$

2. $\sim (A \vee B) \quad / \therefore C$

2. 1. $A \equiv B$

$/ \therefore \sim B \vee A$

3. 1. $(\exists x)(y)Fxy \quad / \therefore (y)(\exists x)Fxy$

四、用解釋的方法或展開式法尋找反例，證明下面的論證無效： 10%

1. $(x)(Ax \supset Bx)$

2. $(\exists x)\sim Ax \quad / \therefore (x)\sim Bx$

東吳大學 106 學年度碩士班研究生招生考試試題

第 2 頁，共 2 頁

| | | | |
|----|--------|------|--------|
| 系級 | 哲學系碩士班 | 考試時間 | 100 分鐘 |
| 科目 | 邏輯 | 本科總分 | 100 分 |

五、在有存在(意涵)假定下，當語句”All college students are intelligent.”為真時，請用「真」或「假」 回答下列題目： 20%

1. Some college students are not intelligent.
2. No college students are nonintelligent.
3. Some college students are nonintelligent.
4. Some who are nonintelligent are college students.
5. None who are nonintelligent are college students.
6. Some college students are intelligent.
7. Some who are nonintelligent are not noncollege students.
8. Some who are intelligent are not noncollege students.
9. No college students are intelligent.
10. None who are nonintelligent are noncollege students.

六、請用“Yes ”或 “No”回答下列問題： 20%

1. Can all members of an inconsistent set of sentences be true?
2. Can an argument be sound but not valid?
3. Can an inductively strong argument have all true premises and a false conclusion?
4. Can some members of an inconsistent set of sentences be true?
5. Can a deductively valid argument have a false conclusion?
6. Can a deductively invalid argument have a true conclusion?
7. Can a deductively valid argument have all true premises and a false conclusion?
8. Have we proved that the conclusion of a deductively valid argument is true when we have established that its premises are all true?
9. Can a deductively valid argument have false premises?
10. Can an argument have all true premises and a true conclusion, yet not be deductively valid?