

國立臺北科技大學

一〇五學年第一學期電機系博士班資格考試

電力系統保護與協調 試題

第一頁 共一頁

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注意事項：

1. 本試題共【6】題，配分共 100 分。
2. 請按順序標明題號作答，不必抄題。
3. 全部答案均須答在試卷答案欄內，否則不予計分。
4. 考試時間：二小時。

1. (20%) Describe the meanings, properties and the application of the following items
 - (1) The Distance Relay
 - (2) The Differential Relay
 - (3) The Under Voltage Relay
 - (4) The Over Voltage Relay
2. (10%) What are the different types of faults in the power systems? Which of those are symmetrical fault? Which of those are unsymmetrical fault?
3. (10%) What are the five kinds of protective zone? Sketch a diagram to indicate the functioning of the protective zone.
4. (20%) Explain how an Over Current Relay apply and coordinate with a Circuit Breaker? Describe the main factors that determines the operating time.
5. (20%) What is the Principal of Over Current Relay protective coordination and what matters should be considered?
6. (20%) (1) Describe the purpose of Grounding. (2) Sort out the advantages and disadvantages between the grounded system and the ungrounded system. (3) There are four types of system grounding in the power system. Describe these four types of system grounding.

