

國立臺北科技大學

九十九學年第一學期電機系博士班資格考試

電力系統品質 試題

第一頁 共一頁

--	--	--	--	--	--	--	--

注意事項：

1. 本試題共【1】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 of the following items.
 - (1)Voltage Sag and Swell
 - (2)Distortion Power Factor
 - (3)Switching Overvoltage
 - (4)Three-phase Unbalance
2. (20%)Explain the sources and classes of power system harmonics and the strategies to improve harmonics.
3. (20%)Explain the reasons to cause voltage flicker in power system and the strategies to improve voltage flicker.
4. (20%)Explain the harmonic problems of series resonance and the strategies to improve the harmonic of series resonance.
5. (20%)Explain the definitions and usages of Power Quality Index(PQI).