

國立高雄應用科技大學
九十八學年度碩士班招生考試
土木工程與防災科技研究所（已組）

准考證號碼 （考生必須填寫）

土木工程概論

試題 共 1 頁，第 1 頁

注意：a.本試題共 5 題，每題 20 分，共 100 分。(5 problems, 20% each, total 100%)
b.作答時不必抄題。(Write your answers on separate answer sheets)
c.考生作答前請詳閱答案卷之考生注意事項。(Read instruction before start)

1. Taipei 101 building is the landmark in Taipei and once the tallest building in the world. Please discuss what aspects in structure design should be considered for such a skyscraper like Taipei 101 when wind, typhoon, and earthquake are of concern. (20%)
2. Please briefly explain: what are (slurry) diaphragm wall and retaining wall? (sketches preferable) When are they used? And what are the differences between them? (20%)
3. When construction materials are considered, please discuss how we could build more environmental friendly buildings? (20%)
4. Assume that you are a project manager for an apartment complex building, and your project is in the phase of underground excavation. If a site engineer phoned you about a water leakage from diaphragm wall at 11 o'clock on a heavy raining night, what are your courses of action? (20%)
5. What is your career plan after you completed the graduate program and what do you want to accomplish 10 years from now? (20%)