國立成功大學

111學年度碩士班招生考試試題

編　　號：282

系　　所：環境醫學研究所

科　　目：作業環境測定

日　　期：0220

節　　次：第 3 節

備　　註：不可使用計算機

※ 考生請注意：本試題不可使用計算機。　請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

1. Please describe the definition of "systemic errors" and "random errors" in conducting the environmental monitoring, and give two examples for each type of error. (20%)

2. Please describe the sampling strategy for assessing workers' noise exposures. (20%)

3. Please describe the sampling strategy for assessing workers' thermal exposures. (20%)

4. Please describe "the maximum exposure risk group sampling strategy". Please indicate how to calculate the upper and lower 95% confidence limits (UCL and LCL) if the measured air concentration of compound A is found to be B ppm. If the above results show that resultant LCL is greater than the PEL-TWA of compound A, what does it mean to you? (20%)

5. Please describe the definition of "respirable aerosols". Please explain the situations which respirable aerosols should be collected and explain why. (20%)