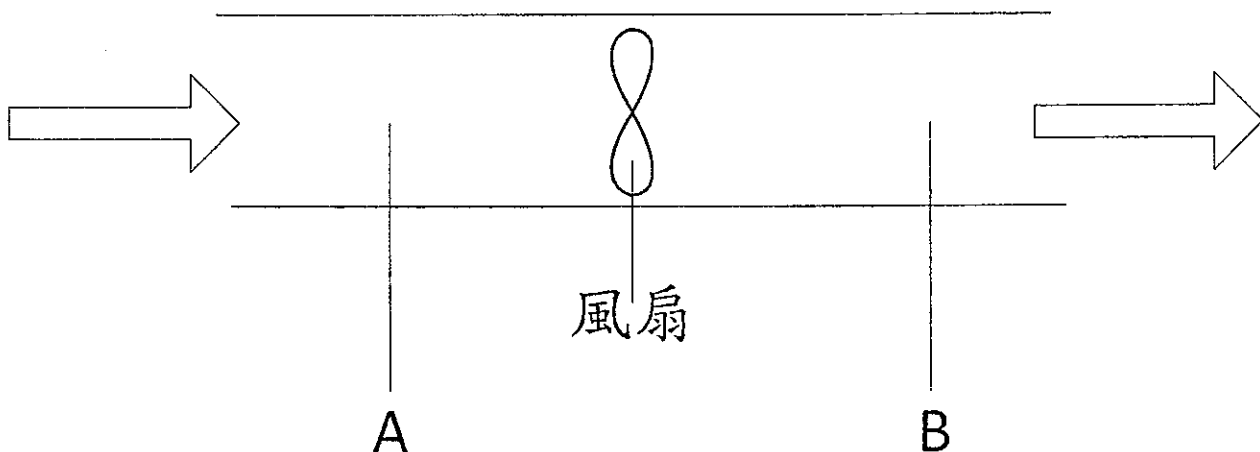


※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

1. Please describe effective temperature and the wet bulb globe temperature. (10%)
2. The lower explosive limit (LEL) for acetone (MW: 58 g/mol) is 2.5% and the 8-hour TWA is 1780 mg/m<sup>3</sup>. What is the 8-hour TWA for acetone in ppm? (5%) At 3% LEL, what is the acetone concentration (in ppm) in air? (10%)
3. Please link the following three workplaces (1. pharmaceutical clean room 2. ambient environment 3. Poultry farm) to three different level of bioaerosol concentration below? (9%) Should we use high or low flow rate sampler when sampling low concentration environments? Please also explain the reason. (6%)
  - (a) Low concentration (<100 CFU/m<sup>3</sup>)
  - (b) Medium concentration (100-10000 CFU/m<sup>3</sup>)
  - (c) High concentration (> 1000 CFU/m<sup>3</sup>)
4. How do we use the 95 percent lower confidence limit (LCL) and/or upper confidence limit (UCL) in comparison with the permissible exposure limit (PEL) to
  - (1) determine if the workplace is over the permissible exposure limit (PEL)? (10%)
  - (2) determine when we need to start using control methods? (5%)
5. What are the differences and similarities between 1/1 octave band analyzer and 1/3 octave band analyzer? (10%)
6. In the duct below where the flow direction is from the left to right, the velocity measured at point A and B are both 16 m/s. Please compare the (1) velocity pressure (5%) (2) total pressure (5%) (3) static pressure (5%) of point A and B. Please also explain your reasons.



編號：316

國立成功大學 106 學年度碩士班招生考試試題

系 所：環境醫學研究所

考試科目：工業衛生

考試日期：0214，節次：2

第 2 頁，共 2 頁

7. 請指出近來勞動基準法中關於例假及休息日(一例一休)，修法前後的兩項差異?(10%)

8. 請解釋下列名詞:

(1)照度(5%) (2) 高架作業(5%)