

※ 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 explain the following term: (18%)
(A)IDLH (B) NOAEL (C) Fit factor (D)BEI (E)STEL (F) capture velocity
2. In industrial ventilation, does fume or industrial dust require a higher transport velocity? (5%) What is the reason? (5%)
3. According to the first fan law, what do we have to do in order to increase the airflow in the duct by a factor of 2? (10%)
4. Please describe the differences between quantitative and qualitative test fitting for respirators. (5%)
What is the difference between a fit test (密合度測試) and a seal check (密合檢點)? (5%)
5. Why is asbestos dangerous to the human health? (6%) Please give two examples of industries that used asbestos? (4%)
6. Please list two engineering control methods for heat stress? (10%)
7. How does the temperature and test material thickness affect the breakthrough time of the chemical during the test for resistance of protective clothing material to permeating by liquids or gases? (10%)
8. 依據職業安全衛生設施規則，雇主使勞工從事輪班、夜間工作、長時間工作等作業，為避免勞工因異常工作負荷促發疾病，應採取哪些疾病預防措施? (6%)
請舉出兩項勞工過勞的症狀? (6%)
9. We have 100 ml of 95 % ethanol that is used for disinfection, how do we dilute it into 75 % ethanol? (10%)