

※ 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。

一、解釋名詞 (每題 5 分，共 20 分)

1. Quality assurance      2. Safety check-list table      3. Value engineering      4. BCWP/ACWP

二、問答題 (共 50 分)

1. What are the steps required for a project schedule? (10 分)
2. What are the main steps in developing the cost estimate? (10 分)
3. Take the Taipei 101 Building as an example, please discuss the contents of the feasibility analysis during this project planning stage. (10 分)
4. Please (1) translate the following statements into Chinese (10 分), and (2) discuss the disadvantages of lump-sum, unit-price and negotiated contract formats. (10 分)

A lump-sum contract is one in which the contractor quotes one price, which covers all work and services required by the contract plan and specifications. In contrast to the lump-sum, the unit-price contract allows some flexibility in meeting variations in the amount and quantity of work encountered during construction. The third widely used contract format is the negotiated contract. This type of contract shows owner flexibility to select the contractor on a basis other than low bid.

三、計算題 (共 30 分)

Given the following network, where the numbers represent both of the activity duration (day) and budget cost (thousand US dollars). Please

1. Complete the scheduling calculations. (15 分)
2. Draw the cumulative cost table and curve based on the ES (early start) schedule plan. (15 分)

