

國立高雄應用科技大學
107 學年度研究所碩士班招生考試
工業工程與管理系碩士班
生產管理

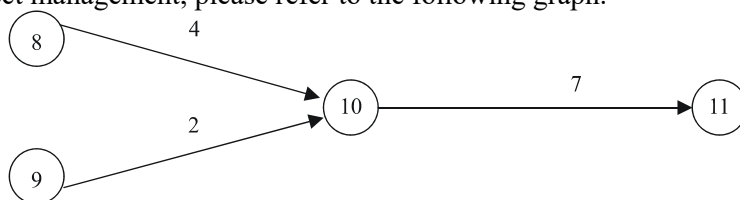
試題 共 2 頁，第 1 頁

- 注意：a. 本試題共 4 大題，共 100 分。
b. 作答時不必抄題，但請務必依題目順序作答。
c. 考生作答前請詳閱答案卷之考生注意事項。

【題目自此開始】

1. Multiple Choice (40%)

- (1). In an MRP master schedule, the planning horizon is often separated into a series of times periods called:
- A) pegging
 - B) lead times
 - C) stacked lead times
 - D) time buckets
 - E) firm, fixed and frozen
- (2). In “Quality Control”, a c-chart is used for:
- A) means
 - B) ranges
 - C) percent defective
 - D) fraction defective per unit
 - E) number of defects per unit
- (3). Regarding project management, please refer to the following graph.



Given the portion of the network shown above, what is the earliest finish time for activity 10-11 (far right hand side), if the earliest start time of 8-10 (upper left hand side) is 12, and the earliest start time of 9-10 (lower left hand side) is 13?

- A) 22
 - B) 23
 - C) 24
 - D) 19
 - E) 11
- (4). JIT philosophy suggests that workers are
- A) To be phased out
 - B) Liabilities
 - C) Assets
 - D) Replaceable
 - E) Interchangeable

(5). Average completion (flow) time for a schedule sequence at a work center is:

- A) total processing time divided by the number of jobs
- B) total flow time divided by total processing time
- C) total processing time plus total late time divided by number of jobs
- D) total flow time divided by the number of jobs
- E) total flow time plus total late time divided by number of jobs

2. Keywords Description (32%)

- (1) Bill of Material (BOM)
- (2) Two-Bin System
- (3) Delphi Method
- (4) Johnson Rule

3. (14%) A new car dealer has been using exponential smoothing with an alpha of .2 to forecast weekly new car sales. Given the data below, would a naive forecast have provided greater accuracy? Explain. Assume an initial exponential forecast of 60 units in period 2 (i.e., no forecast for period 1).

Period		Demand
1		57
2		62
3		58
4		60
5		60
6		56

4. (14%) A manager has developed a payoff table that indicates the profits associated with a set of alternatives under two possible states of nature. Answer the following questions.

Alt.	S1	S2
1	10	2
2	-2	8
3	8	5

- (A) If the manager uses maximin as the decision criterion, which of the alternatives would be indicated? (4%)
- (B) If the manager uses minimax regret as the criterion, which alternative would be indicated? (2%)
- (C) Determine the expected value of perfect information if $P(S2) = 0.40$. (4%)
- (D) Determine the range of $P(S2)$ for which each alternative would be optimal. (4%)

【試題結束】