

1. (12%) Name and briefly describe each of the two basic types of competitively bid construction contracts. What are their pros and cons? List an example work suitable for each of competitively bid construction contracts.
2. (6%) Name two types of negotiated contracts and describe the method of payment and incentive concept.
3. (9%) Describe three different stakeholders involved in a construction project. Describe their roles and responsibility.
4. (10%) (a) Compare Design-Build and Design-Bid-Build; what are their pros and cons?
(3%) (b) Are there any other construction project delivery method? What is its advantage?
5. (12%) True and False (If the statement is false, explain why it is "false")
 - (a) A common and effective project management technique is to assign more people to the team if a project gets behind schedule.
 - (b) One key to successful project management is to commit to a fixed budget and schedule as early as possible and then stick to it.
 - (c) The construction drawings of a building project are drawings that the architect uses to explain the design to the owner.
 - (d) BIM is the most recently developed project delivery method.
6. (15%) For the following schedule, draw the node network, perform the CPM calculations, mark the critical path, and complete the table.

Activity	Duration	IPA	Lag	ES	EF	LS	LF	TF	FF
A	5	-							
B	5	A							
C	4	A	3						
D	5	A							
E	3	B							
F	2	C, B							
G	3	D, E							

- IPA: immediate preceding activities

7. (5%) What is the primary concern of material management on a project?
8. (5%) Describe ways in which the project manager can positively or negatively impact the project cash flow.
9. (9%)
 - (a) What is the future value 8 years from, of \$ 2,000 invested today at a periodic interest rate of 12% compounded annually?
 - (b) What would be the result of the previous problem, if simple interest were used?

見背面

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10. (10%) What is PERT? What are the advantages of using PERT? Discuss at least three difficulties of conducting PERT?

11. (4%) What actions could you as the contractor take to instill a sense of safety among your workers?

試題隨卷繳回