

所別：營建管理研究所碩士班 一般生 科目：營建管理

1. Recently, corruption and scandals have plagued the construction industry. As an engineer-to-be, there are still many bright sides guiding you to a glorious career. According to the American Institute of Constructors, expected ethical behavior is written out as a code of ethics. What are the standards of professional conduct? (15 points)
2. To carry out a project, engineers usually work on analyses in advance. One of them is risk assessment. Please state major types of risks for a common project and a BOT project. (10 points) Compare these two project types to summarize differentiation. (5 points)
3. According to Government Procurement Laws, providing services such as programming and consulting is qualified to initiate a set of procurement procedures. How to process these procedures is a key to improve the quality of a construction project. Please list, at least, 8 required documents in a bid document package. (10 points)
4. A great set of delivery method and contract type can maximize the owners' interests. An owner is trying to find a contract type that makes him getting the savings but his contractor taking the risks. What kind of contract type is this? (5 points) Please explain briefly. (5 points)
5. Activities of a specific project are listed in the table below. The project has an indirect cost of \$10 per day. What is the minimum project cost (direct cost plus indirect cost) when the project is to be finished in 14 days? (15 points) What is the minimum project duration? (5 points)

Activity	Normal Duration (in day)	Crash Duration (in day)	Normal Cost (in \$)	Crash Cost (in \$)	Followers
A	6	4	60	100	B、C
B	4	3	40	50	E
C	5	4	50	55	D、E、G
D	4	3	50	75	F
E	3	2	30	50	F
F	3	1	20	40	-
G	6	4	70	80	-

6. Please explain the following terms: (30 points, 5 points each)
 - (a) Work Breakdown Structure
 - (b) Life Cycle Cost
 - (c) Value Engineering
 - (d) Dispute Review Board
 - (e) Radio Frequency Identification
 - (f) Active Server Page