

班級:_____ 學號:_____ 姓名:_____ (共 2 張 4 面)

一、選擇題 (30%) (請將答案填入答案欄中)

1	2	3	4	5	6	7	8	9	10
(B)	(D)	(D)	(C)	(C)	(A)	(C)	(D)	(B)	(C)
11	12	13	14	15					
(A)	(B)	(C)	(B)/(C)	(B)					

- The ____ systems are also referred to as expert systems.
(A) user productivity (B) knowledge management (C) business support (D) TP
- The people who interact with an information system, both inside and outside the company, are called ____.
(A) critical users (B) staff users (C) model users (D) end users
- The starting point for most systems projects is a(n) ____.
(A) strategic plan (B) critical breakdown (C) objective chart (D) systems request
- Benefits that can be measured in dollars are referred to as ____.
(A) ownership benefits (B) intangible benefits (C) tangible benefits (D) TCO benefits
- The end product of a preliminary investigation is ____.
(A) a survey to personnel regarding project benefits (B) an analysis of the problem or opportunity (C) a report to management (D) fact-finding about development time and costs
- A ____ statement is developed based on a company's purpose, vision, and values.
(A) mission (B) business resource (C) corporate resource (D) management
- ____ feasibility means that a project can be implemented in an acceptable time frame.
(A) Technical (B) Time (C) Schedule (D) Operational
- ____ refers to system characteristics such as speed, volume, capacity, availability, and reliability.
(A) Outputs (B) Inputs (C) Processes (D) Performance
- ____ refers to hardware, software, and procedural controls that safeguard and protect the system and its data from internal or external threats. (A) Monitoring (B) Security (C) Performance (D) Output
- A ____ is a process that has at least one input and one output, but the input obviously is insufficient to generate the output shown. (A) blue box (B) black box (C) gray hole (D) black hole
- An application that is designed to meet the unique requirements of a specific business or industry is considered to be a ____.
(A) vertical system (B) horizontal system (C) data system (D) legacy system
- A ____ sample would select every tenth customer from a list for review.
(A) random (B) systematic (C) stratified (D) structured
- A ____ diagram visually represents the interaction between users and the information system.
(A) data case (B) requirements case (C) use case (D) design case
- Risk ____ lists each risk and assesses the likelihood that it could affect the project.
(A) response (B) management (C) identification (D) analysis
- Internal factors that affect systems projects do NOT include ____.
(A) strategic plan (B) suppliers (C) top managers (D) IT department

二、是非題 (20%) (將對的選項塗滿)

T	F	Question
<input type="radio"/>	<input checked="" type="radio"/>	1. The responsibilities of a system analyst at a small firm are exactly the same as those at a large corporation.
<input checked="" type="radio"/>	<input type="radio"/>	2. Analyzing organization charts is part of the preliminary investigation.
<input checked="" type="radio"/>	<input type="radio"/>	3. Data flow diagrams show what a system does, not how it does it.
<input type="radio"/>	<input checked="" type="radio"/>	4. Rapid application development (RAD) is a team-based technique that speeds up information systems development but doesn't produce a functioning system like JAD does.
<input type="radio"/>	<input checked="" type="radio"/>	5. Systems development typically starts with a feasibility study.
<input type="radio"/>	<input checked="" type="radio"/>	6. The letters SWOT stand for strengths, weaknesses, options, and threats.
<input type="radio"/>	<input checked="" type="radio"/>	7. Most large companies rely on one person to evaluate systems requests instead of a committee.
<input checked="" type="radio"/>	<input type="radio"/>	8. If any task along the critical path falls behind schedule, the entire project is delayed.
<input checked="" type="radio"/>	<input type="radio"/>	9. Stronger controls and reduced cost are two of the main reasons for system requests.
<input type="radio"/>	<input checked="" type="radio"/>	10. In a DFD, a process symbol can have one outgoing data flow.

三、簡答題 (20%)

1. Describe skills a successful system analyst needs. 試說明一位成功的系統分析師所需的條件。(每個條件 1 分)

2. What are the main reasons for system requests? 系統需求的主要理由有哪些?

1. Improved service
2. Support for new products and services
3. Better performance
4. More information
5. Stronger controls
6. Reduced cost

3. Identify the main components of an information system. 列出資訊系統的主要組成。

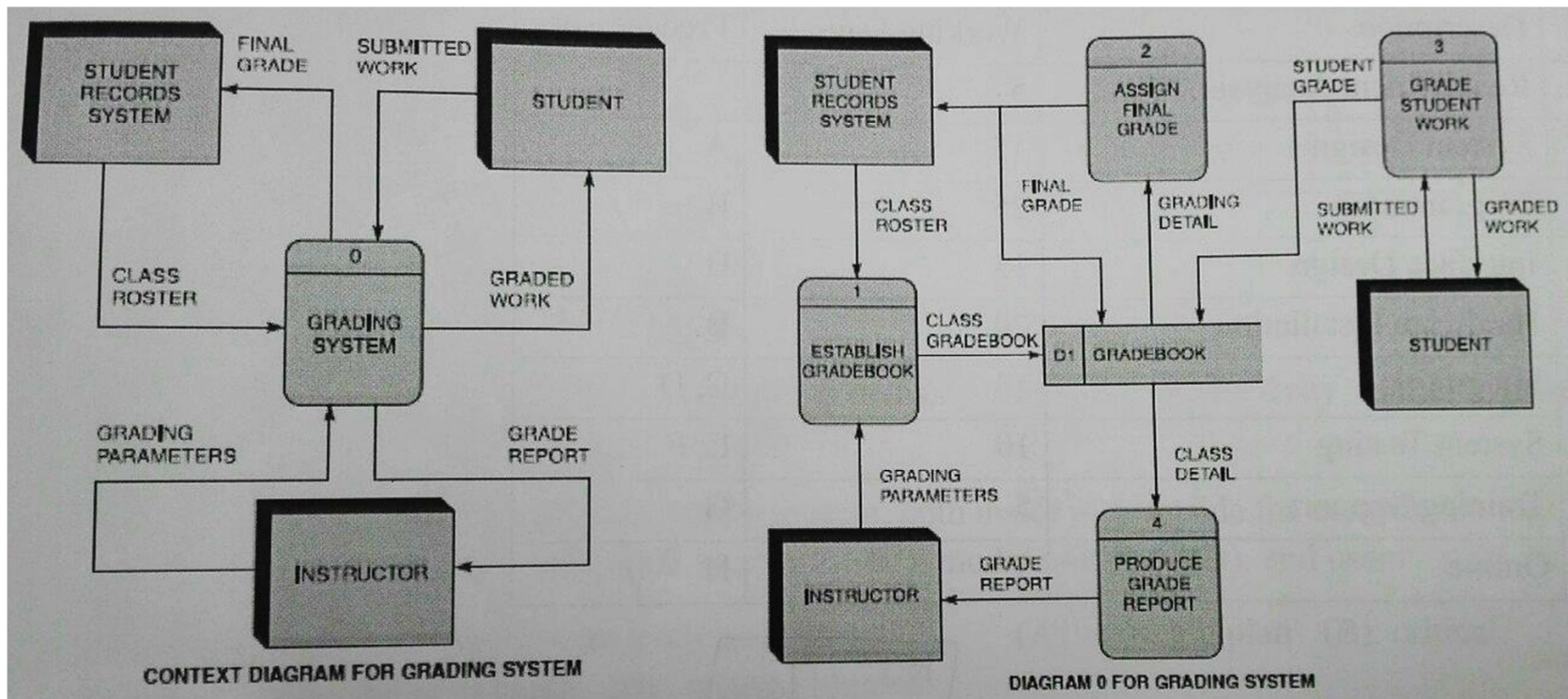
1. Hardware
2. Software
3. Data
4. Processes
5. People

4. Describe the phases of the system development life cycle. 描述系統發展生命週期的階段。

1. Systems planning
2. Systems analysis
3. Systems design
4. Systems implementation
5. Systems support and security

四、問答題 (35%)

1. Using the figures: “context diagram for grade system” and “diagram 0 for grade system”, to answer the question.



(a) What is the relationship between a context diagram and diagram 0? (5%)

(b) Which symbol is not used in a context diagram? (2%)

Data store

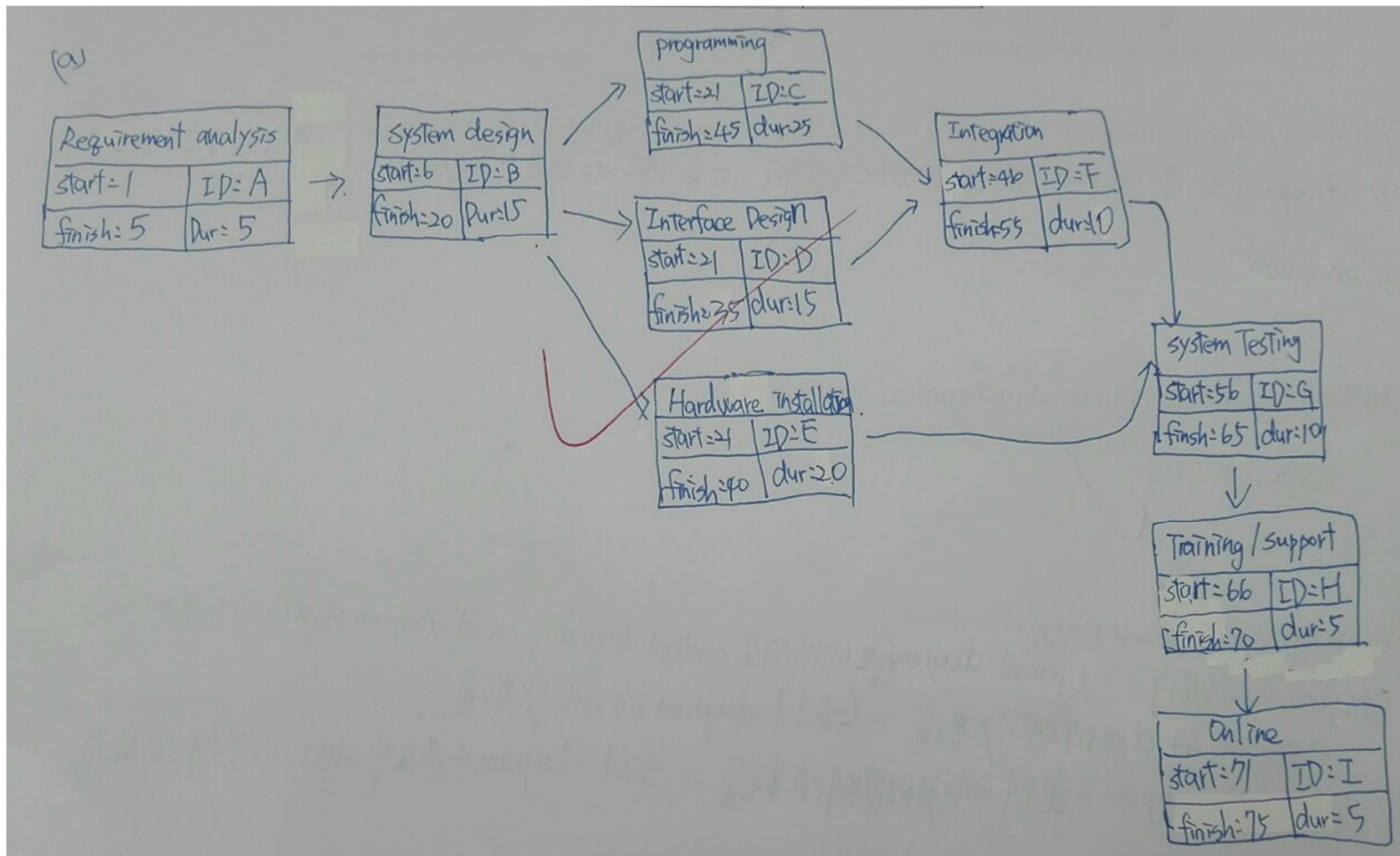
(c) What is a balanced DFD? (5%)

(d) Explain the DFD leveling. (5%)

2. Using the information in the table to answer the question.

Task	Description	Working Days	Predecessors
A	Requirement Analysis	5	
B	System Design	15	A
C	Programming	25	B
D	Interface Design	15	B
E	Hardware Installation	20	B
F	Integration	10	C, D
G	System Testing	10	E, F
H	Training/Support	5	G
I	Online	5	H

- (a) Create a PERT/CRM chart. (10%)



- (b) Estimate the total time. (3%)

5+15+25+10+10+5+5=75 (working days)

- (c) What is the critical path? (5%)

A→B→C→F→G→H→I