

EC Websites Development 2008 Fall
Mid-Term Examination
Duration: 3 hours

INSTRUCTIONS : This paper consists of 3 sections. You need to select 2 questions from Section A and two questions from Section B. Each question carries 20 marks. Section C consists of 20 MC questions. Each question carries 4 marks. In each MC question, you have only to select one answer. Section C is also the bonus section of the paper. You should attempt at many as you can. The maximum score that you can get from Section C is 80. That is to say, student can get at most 160 marks in this paper. For those score higher than 100 will be added up to the Mid-term score.

SECTION A

Question 1

- (a) What is the definition of information systems [5 marks].
- (b) Using a business case as an example and with an aid of diagrams, describe the relationships amongst business processes, information systems and information technologies. [5 marks]
- (c) With an aid of diagrams, explain the differences system structure, system , security control, data ownership, between conventional and contemporary types of information systems in accordance with their (i) system structures, (ii) system security control, (iii) data ownership and (iv) requirement gathering. [10 marks]

Question 2

- (a) With an aid of diagrams, describe in detail the (i) the waterfall model [5 marks] and (ii) the spiral model [5 marks] that help system development. (In your answer, you are expected to add diagrams to help your descriptions. Besides, you should highly the advantages and disadvantages of applying such methodologies.)
- (b) With reference to waterfall model, briefly describe the roles and responsibilities of the participants in a system development project, and in which phase(s) they have to take part in. [10 marks]

Question 3

- (a) Describe how *network technologies* can facilitate the business activities of a company. [10 marks]
- (b) Describe in your own words why a development team should *acquire* knowledge in the latest information technologies and should a development team have a throughout understanding in all these latest technologies? [10 marks]

SECTION B

Question 4

- (a) Describe in details the roles and responsibilities of each participant in a system development project? [10 marks]
- (b) Describe the similarities and differences amongst feasibility analysis, requirement analysis, system analysis. [10 marks]

Question 5

Select a website from Travelocity.COM, Global-Trade.COM, iSteelAsia.COM and Forbes.COM,

- (a) describe the potential users of the website [5 marks],
- (b) the underlying information technologies being used [5 marks],
- (c) the services that the company provides, [5 marks] and
- (d) discuss how the website helps to make money (or reduce operational cost) for the company. [5 marks]

Question 6

- (a) The underlying principles governing component-based development are *reusability* and *components*. Describe what are they and how they make component-based development succeed. [10 marks]
- (b) Could the idea of component-based development be merged with rapid application development approach and why? [10 marks]

SECTION C : Multiple Choice

Question 7

Which of the following is(are) the function of an information system ?

- (i) Collect information
 - (ii) Store information
 - (iii) Making decision for the board of directors
 - (iv) Provide suggestion for the board of directors
- (a) (i) & (ii) only;
 - (b) (i), (ii) & (iii) only;
 - (c) (i), (ii) & (iv) only;
 - (d) (i), (ii), (iii), & (iv)

Question 8

Which of the following items is the most likely to be considered as an intangible benefit ?

- (a) Increase in customer satisfactory level.
- (b) Decrease in operational cost.
- (c) Increase the sales revenue.
- (d) Reduce the time for selling one product.

Question 9

Which of the following sequence is the best sequence describing the phases in system development ?

- (a) Feasibility analysis, system implementation, user interface design, planning
- (b) Project design, system implementation, system design, system analysis
- (c) System analysis, system design, feasibility analysis, implementation
- (d) Project planning, system analysis, system design, implementation

Question 10

Which of the following is(are) the work that needed to be handled in the planning phase ?

- (i) Develop training plan
- (ii) Develop support plan
- (iii) Gather business requirement
- (iv) Develop work plan

Answer:

- (a) (i) & (iii) only
- (b) (ii) & (iv) only
- (c) (iii) only
- (d) (iv) only

Question 11

Which of the following work is needed to be handled in the analysis phase ?

- (a) Economic feasibility analysis
- (b) Technical feasibility analysis
- (c) Organizational feasibility analysis
- (d) Process modeling

Question 12

Which of the following designs is(are) needed to be handled in the design phase ?

- (i) Architectural design
- (ii) Fashion design
- (iii) Interior design
- (iv) Interface design

Answer:

- (a) (i) & (ii) only
- (b) (ii) & (iv) only
- (c) (ii) & (iii) only
- (d) (i) & (iv) only

Question 13

The task determining *who uses system, what will it do, where and when will the system be used* is to be done which phase ?

- (a) Analysis
- (b) Design
- (c) Implementation
- (d) Planning

Question 14

Which of the following is likely to be a *deliverable* in the implementation phase ?

- (a) System request
- (b) System proposal
- (c) System specification
- (d) System maintenance plan

Question 15

Which of the following development methodologies is suitable for large and yet risky system development ?

- (a) Waterfall
- (b) Rapid application development
- (c) Parallel phase
- (d) Spriral model

Question 16

In which phase should the data modeling be done ?

- (a) Planning
- (b) Analysis
- (c) Design
- (d) Implementation

Question 17

Which of the following items should be considered as a criteria for the selection of methodology ?

- (i) Complexity of system
- (ii) Time schedule
- (iii) Clear user requirement
- (iv) Familiarity of system

Answer:

- (a) (iv) only
- (b) (iii) & (iv) only
- (c) (ii), (iii) & (iv) only
- (d) All of them

Question 18

Which of the following statement is the best definition for project management ?

- (a) Project management is the process of planning and controlling the development of a system within a specified timeframe at a minimum cost with the right functionality.
- (b) Project management is the process of analysis and design the development of a system within a specified timeframe at a minimum cost with the right company strategy.
- (c) Project management is the process of analysis and implementing the development of a system within a specified timeframe at a minimum cost with the right functionality.
- (d) Project management is the process of reviewing and controlling the development of a system within a specified timeframe at a minimum cost with the right company strategy.

Question 19

Which of the following skills should not be considered as a general skill an analyst should have?

- (a) interpersonal skills
- (b) technical skills
- (c) managerial skills
- (d) Java skills

Question 20

In which phase, *programming, software testing, performance testing and training* would generally take place ?

- (a) Planning
- (b) Analysis
- (c) Design
- (d) Implementation

Question 21

Which of the following would be an example of poor technical feasibility?

- (a) the project will require new hardware that is an upgrade of existing computer systems
- (b) the project will utilize a Unix platform although we do not have any existing Unix systems
- (c) the project will cause us to add additional modules to our existing SAP system
- (d) the project will pay for itself in 4 years.
- (e) the project is compatible with existing systems

Question 22

Which of the following statement(s) is(are) correct in system development ?

- (a) Documentation should not be done since it costs too much time and effort.
- (b) System review should only be done in the beginning phase and not in the progress of development.
- (c) If follow any one of the methodologies, the system being developed will be *perfect*.
- (d) The information provided in any *Systems Analysis & Design* course is simply for reference. Developer has the freedom to design his/her own methodology.

Question 23

Which of the following technique is unlikely for requirement gathering?

- (a) JAD.
- (b) Interview.
- (c) Document analysis.
- (d) Prototyping.

Question 24

Which of the following about *store* in a DFD is not true?

- (a) A store is a database.
- (b) A store is a file.
- (c) A store is an entity.
- (d) A store can be a database or a file.

Question 25

Which of the following statement about ERD is not true?

- (a) ERD is a picture showing how data will actually be stored in databases or files.
- (b) An entity must be multiple occurrences.
- (c) Lines drawn between entities show relationships among the data.
- (d) An entity is a person, place, event, or thing about which data is collected.

Question 26

Which of the following email address should the project reports specifically be sent to ?

- (a) pfsun@yahoo.com.hk
- (b) pfsun@hotmail.com
- (c) pfsun@nchu.edu.tw
- (d) All of the above.