

SOUTH EASTERN UNIVERSITY OF SRI LANKA**THIRD EXAMINATION IN BACHELOR OF BUSINESS ADMINISTRATION AND
COMMERCE - 2009/2010****SEMESTER - 1 AUGUST - 2011****MIS 3102 SYSTEMS ANALYSIS AND DESIGN****Answer all questions****Time: 03 Hours****Q1.**

1. The principal role in systems projects is played by the Systems Analyst. Explain skills needed to become a successful Systems Analyst.

(10 Marks)

2. Differentiate among Systems Analyst, Business Analyst and Programmer.

(3 Marks)

3. Differentiate between Business Process Redesign (BPR) , Continuous Process Improvement(CPI) and how both affect Systems Analyst.

(7 Marks)

(Total 20 Marks)

Q2.

1. Briefly explain 10 fundamental principles of system development.

(7 Marks)

2. Describe the causes of failed Information Systems and Technology projects.

(5 Marks)

3. Explain Project Management life cycle activities.

(8 Marks)

(Total 20 Marks)

Q3.

1. Define systems requirements and differentiate between functional and non-functional requirements.

(3 Marks)

2. How can you create an Ishikawa (Fishbone) diagram to aid in problem discovery and analysis?

(6 Marks)

3. Identify the typical participants in Joint Requirements Planning (JRP) session and describe their roles and skills.

(6 Marks)

4. Differentiate between JRP and Discovery Prototyping.

(5 Marks)

(Total 20 Marks)

Q4.

1. Explain logical and physical models?

(3Marks)

2. You are required to create an Entity Relationship Diagram based on the following requirements of the company.

- The company is organized into departments. Each department has a name, number, and employee who manages the department. And keeps track of the start date of the department manager. A department may have several locations.
- Each department controls a number of projects. Each project has a unique name, unique number and is located at a single location.
- Company stores each employees identification no, address, salary, sex and birth date. Each employee works for one department but may works on several projects. We keep track of the number of hours per week that an employee currently works on each project. We also keep track of the direct supervisor of each employee.
- Each employee may have a number of dependents. For each dependent, we keep track of their name, sex, birth-date, and relationship to the employee.

(8 Marks)

3. Perform 1NF, 2NF, 3NF for the following Purchase Order Relation in 0NF

PO-NO	PO-DATE	EMP-CODE	SUPP-NO	SUPP-NAME	PART-NO	PART-DESC	PART-QTY
111	01012011	M2	222	AC Stores	P1	Nut	12
					P2	Bolt	4
					P3	Nail	5
					P5	Screw	5
112	01012011	S2	106	BC Trading	P2	Bolt	3
					P5	Screw	8
113	02012011	T2	176	PB Services	P1	Nut	9
					P3	Nail	8
					P6	Plug	12
114	02012011	M2	222	AC Stores	P7	Pin	12
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(9 Marks)

(Total 20 Marks)

Q5.

Write short notes on the followings.

- i. Data Modeling
- ii. Rapid Application Development (RAD)
- iii. Gantt Chart
- iv. Repository
- v. Structured English
- vi. Data Dictionary
- vii. Multi-valued attribute
- viii. Object Oriented Analysis

(Total 20 Marks)