OLABISI ONABANJO UNIVERSITY
AGO-IWOYE
FACULTY OF LAW
2011/2012 RAIN SEMESTER EXAMINATIONS

COURSE TITLE: SYSTEM ANALYSIS AND DESIGNS **COURSE CODE:** PRL 215

TIME ALLOWED: 2½ HOURS. **INSTRUCTIONS**: (a) Answer Four (4) Questions in all. (b) Please do all jottings on your answer sheet/booklet. (c) Write your MATRIC NUMBER : (here) and on your answer sheet/booklet.

1a. Distinguish between a couple and cohesion.

b. Design a structured chart using the following information:

a. Calling Module: RECORD STUDENT GRADES
b. Called Module: GET ACADEMIC RECORD
GET VALID GRADES
ADD NEW GRADES
REPORT ERRORS
CHECK FOR PROBATION
CHECK FOR DEAN'S LIST

c. Include the required input and output couples, showing direction and meaning

d. In the same chart, show CHECK FOR PROBATION as a Calling Module and factor a called module called CALCULATE GPA. Show input and output couples.

2a. The unit price of a particular product is ₦15 if less than 10 are purchased, ₦14 if between 10 and 49 are purchased, and ₦13.80 if 50 or more are purchased. If the customer also has preferred customer status then the purchase is subject to a discount of 10%. Prepare a Decision Table.

b. List the 4 steps in constructing a Data Flow Diagram.

3a. What activities make up system design? How does system design simplify implementation?

b. What is structured analysis? Briefly review the tools used and how does it differ from the traditional approach?

c. How is a structured walkthrough conducted? What is the role of user in this activity?

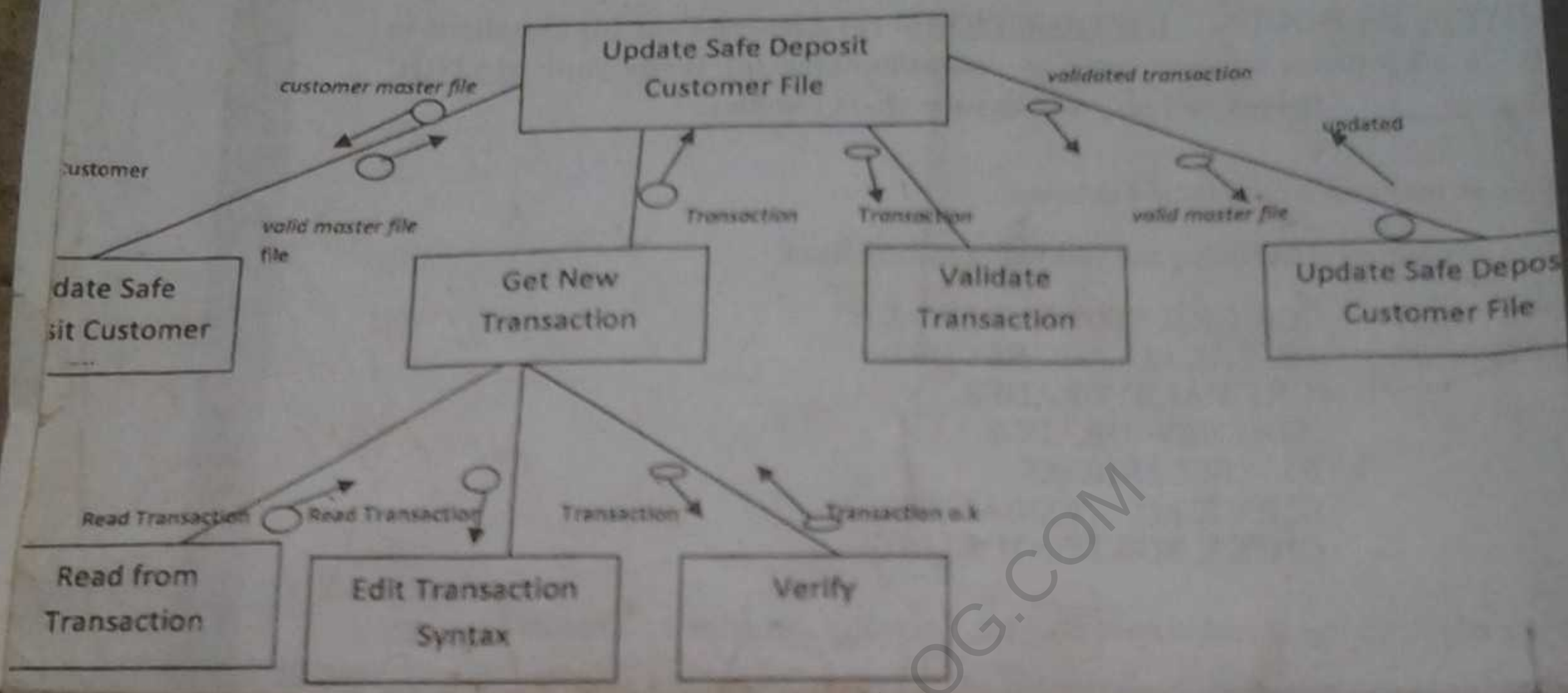
d. Consider an automobile and a hospital as two systems. Identify the following as an input and/or output for each system: Batteries, Cured patient, Doctors, Driver's performance, Drugs, Gasoline, Information, Motion, A patient who died, Tires and X- Ray machine.

4. Explain the importance of the following system concepts for system analysis

i. Data base
ii. Feedback
iii. Interdependence

iv. Open and Closed System
v. Organizational Chart
vi. System and sub –system interface.

Q.5. Use this chart to answer the questions below:



a. How many modules, connection and couples are in the chart above?
b. Which module are the calling modules?
c. How many couples are passed to the calling module?
d. What is the minimum number of call statement inside VERIFY?
e. What is the output of UPDATE SAFE DEPOSIT CUSTOMER FILE?

6 a. What cost elements are considered in cost/benefit analysis? Define and explain the procedure for cost/benefit determination?

b. What categories of information are available for analysis? How would one decide on the category?

c. Describe the concept and procedure used in constructing DFDs.

d. What considerations are involved in feasibility analysis? Which do you think is the most crucial? Why?