

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**FACULTY OF COMMERCE**

**DEPARTMENT OF ACCOUNTANCY**

**Programme:**

Bachelor of Accountancy Honours Degree.

**MAY 2016**

**ACCOUNTING INFORMATION SYSTEM (AC213)**

TIME ALLOWED: 3 HOURS

(100 MARKS)

INSTRUCTIONS TO CANDIDATES:

1. Answer all 4 questions.
  2. No cell phones are allowed in the examination room.
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## QUESTION 1

Fat Computers sells desktop computer systems that it manufactures from parts and software that third party vendors provide. Customers are both private consumers and small businesses. Consumers pay cash or by credit card, but business customers buy on credit. A credit check is made of all new business customers before approving a line of credit. Sales are made online or by a hard-copy order document that customers mail or fax to the company.

When a credit order is received, the sales clerk verifies inventory availability, prepares a sales order and sends the inventory release copy to Wesley, a warehouse employee who picks the goods and arranges shipment. Wesley then prepares the bills of lading and shipping notices. Benitah in the billing department receives the shipping notice from Wesley and updates the inventory subsidiary ledger to account for the reduction in inventory. Benitah files the inventory release, prepares the invoice, and mails a copy of it to the customer. Benitah then updates the sales journal and then sends the invoice, sales order, inventory release and shipping notice to the accounts receivable department.

Admire in the accounts receivable department files the documents that Benitah sends him and updates the accounts receivable subsidiary ledger. Mike in the mail room receives remittance advices and customer cheques sent in payment of accounts. He sends the remittance advice to Admire for posting to the accounts receivable ledger and sends the cheques to Clara, the cash receipts clerk. At the end of the day, she prepares a deposit slip and deposits the cheques into the company's bank account, files the bank receipt, and updates the cash receipt journal.

Cash sales to consumer customers are handled in a manner similar to the process described above except that cheques or credit card account numbers are submitted with the original order.

At the end of each week, Jacob, an accounting clerk, reconciles all transactions and posts them to the general ledger.

### Required:

- a) Prepare the REA model of the sales/collection process. (9 marks)
- b) Show the cardinalities for all associations. (10 marks)
- c) List the tables, keys and attributes needed to implement this model in a relational database. (6 marks)

[Total: 25 marks]

## QUESTION 2

### PART A

Consider the following dialogue between a system professional, Joke Pue, and a manager of a department targeted for a new information system, Lip Mope:

*Pue:* The way to go about the analysis is to first examine the old system, such as reviewing key documents and observing the workers perform their tasks. Then we can determine which aspects are working well and which should be preserved.

*Mope:* We have been through these types of projects before and what always ends up happening is that we do not get the new system we are promised, we get a modified version of the old system.

*Pue:* Well, I can assure you that will not happen this time. We just want a thorough understanding of what is working well and what is not.

*Mope:* I would feel much more comfortable if we first started with a list of our requirements. We should spend some time up-front determining exactly what we want the system to do for my department. Then, your systems people can come in and determine what portions to salvage if you wish. Just don't constrain us to the old system!

**Required:**

- i. Obviously these two workers have different views on how the systems analysis phase should be conducted. Comment on whose position you sympathise with the most. (7 marks)
- ii. Giving reason(s) which method would you propose they take? (5 marks)

**PART B**

- i. Contrast the advantages and disadvantages of using Computer Aided Software Engineering (CASE) tools in the System Development Life Cycle (SDLC). (10 marks)
- ii. Discuss the importance of involving accountants in the detailed design and implementation phases. (7 marks)
- iii. Following your answer in (ii) above, what tasks should they perform? (5marks)

**[Total: 34 marks]**

**QUESTION 3**

ABC Manufacturing Corporation has a flat-file processing system. The information processing facility is very large. Different applications, such as order processing, production planning, inventory management, accounting systems, payroll, and marketing systems, use separate tape and disk files. The corporation has recently hired a consulting firm to investigate the possibility of switching to a database management system.

**Required:**

- a) Prepare a memo to the top management team at ABC explaining the advantages and disadvantages of a database management system (DBMS). (12 marks)
- b) Discuss the necessity of a database administrator and his/her job functions. (4 marks)

[Total: 16 marks]

**QUESTION 4**

Most experts maintain that the computer frauds that are publicly revealed represent only the tip of the iceberg. Although the major threat to computer security is perceived by many to be external, the more dangerous threats come from insiders. Management must recognise these problems and develop and enforce security programs to deal with the many types of computer fraud.

**Required:**

Explain how each of the following five types of fraud is committed by using the format provided below and also identify a different method of protection for each and describe how it works.

<i>Types of fraud description of</i>	<i>explanation</i>	<i>identification and protection methods</i>
(a) Data theft		(5 marks)
(b) Theft of computer time		(5 marks)
(c) File alteration		(5 marks)
(d) Input manipulation		(5 marks)
(e) Program alteration		(5 marks)

[Total: 25 marks]

**END OF EXAMINATION PAPER**