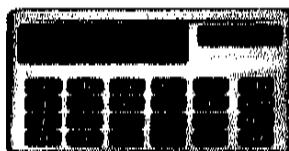


UNIVERSITY EXAMINATIONS



UNIVERSITEITSEKSAMENS

UNISA  university of south africa**DPA202-T  
RDP202-Q**

October/November 2007

**ACCOUNTING DATA PROCESSING 202**

Duration : 2 Hours

100 Marks

EXAMINERS :

FIRST :

MR E GROBBELAAR

SECOND :

MRS A MCGEE

---

Use of a non-programmable pocket calculator is permissible.

**THIS EXAMINATION PAPER CONSISTS OF EIGHT (8) PAGES.****PLEASE NOTE:**

1. **All** questions must be answered.
2. Each question must commence on a separate page.
3. Write the main question numbers numerically on the cover of the answer books.
4. Answer books may not be completed in pencil.
5. This paper consists of nine (9) questions.

**[TURN OVER]**

**QUESTION 1 (9 marks)**

WRITE THE CORRECT ANSWER (A, B, C OR D) NEXT TO THE RELEVANT QUESTION NUMBER.  
EACH CORRECT ANSWER COUNTS ONE (1) MARK.

- 1.1 A disadvantage of a relational database structure is:
- (A) Its inflexibility to *ad hoc* queries
  - (B) Its complicated designs and maintenance
  - (C) Its inability to combine information from different sources
  - (D) Its relatively low processing efficiency
- 1.2 Word-processors are mainly used to:
- (A) Create models where numerical data has to be processed into meaningful reports
  - (B) Allows the user to access information on the World Wide Web (WWW) by using hyperlinked text and graphical images - *Web browser*
  - (C) Create documents, amend them, store them, make hard copies of them and retrieve the information at a later stage and process them further
  - (D) Present information in a visually attractive manner.
- 1.3 Which command allows you to save a file under a new name?
- (A) File → Save
  - ☒ (B) File → Save as
  - (C) File → Open
  - (D) File → Close.
- 1.4 The operational cycle which forms the heart of the business involves the following sub-cycle:
- (A) General ledger cycle
  - (B) Payroll cycle
  - (C) Asset cycle
  - ☒ (D) Revenue cycle.
- 1.5 The sequence for processing customer documents is:
- (A) Quote, sales order, invoice
  - (B) Sales order, quote, credit note
  - (C) Quote, sales order, debit note
  - (D) None of the above.

**[TURN OVER]**

**QUESTION 1 (continued)**

1.6 One of the four (4) typical processing systems used by a business is:

	<u>Input</u>	<u>Processing</u>	<u>Output</u>
(A)	batch	batch	online
(B)	batch	batch	real-time
(C)	batch	online	batch
(D)	batch	batch	interactive

1.7 To build a formula in Excel the following operators can be used:

- (A) Text
- (B) Arithmetic
- (C) A and B
- (D) None of the above.

1.8 The users of a database can be subdivided into three main categories, namely:

- (A) System programmers, end-users and database-administrators
- (B) End-users, programmers and system designers
- (C) Application programmers, end-users and database-administrators
- (D) None of the above.

1.9 A transaction processing system can function successfully only if it has certain characteristics. These characteristics include:

- (A) Rapid feedback
- (B) Reliability
- (C) Controlled processing
- (D) All of the above.

**QUESTION 2 (12 marks)**

INDICATE WHETHER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE. ONLY WRITE THE WORD "TRUE" OR "FALSE" NEXT TO THE RELEVANT QUESTION NUMBER. EACH CORRECT ANSWER COUNTS ONE (1) MARK.

- 2.1 Application software aims to support users in solving data processing tasks of a general nature.
- 2.2 The sorting of data involves arranging the data according to a specific sequence.
- 2.3 Data can be processed into information either by classifying, sorting, calculating or summarising the data into useful information.
- 2.4 A database management system is used as a link between the physical storage of the data and the end-users.
- 2.5 Object-orientated structures are used extensively in web-based applications.
- 2.6 A sales invoice is a typical example of a transaction file which is used to update the master file.
- 2.7 The function of the \$ symbol used in a worksheet formula, is to create relative cell references.
- 2.8 A cell address which is changed, creates a ripple effect of recalculations for all formulas depending on that cell's address.
- 2.9 The bank reconciliation in Pastel will show a journal entry which was made to the cashbook control account.
- 2.10 Purchase orders, once processed and updated will affect the purchase account in the general ledger.
- 2.11 A value is the information entered into a spreadsheet and is used in calculations.
- 2.12 In an open-item debtor's monthly statement, the unpaid invoices are shown as one amount on the next statement.

**[12]****QUESTION 3 (11 marks)****INFORMATION SYSTEM PROCESSING**

"Different database-systems have been developed to accommodate the different data structures."

Required:

- 3.1 Name five (5) different types of database-systems that are used. (5)
- 3.2 Name four (4) advantages of a relational structure. (4)
- 3.3 Name one (1) disadvantage of a relational structure and explain why this occurs. (2)

**[11]****[TURN OVER]**

**QUESTION 4 (13 marks)****DATA PROCESSING**

- 4.1 "Data stored in a database system consist of one or more databases. Data of a related subject are stored in a separate database."

Required:

- 4.1.1 Write down the correct term for the following statements:

- 4.1.1.1 It stores data that are logically related to one another organised in a predefined structure. (1)
- 4.1.1.2 It uniquely identifies the data stored in each column of your database. (1)
- 4.1.1.3 It consists of a number of data fields. (1)
- 4.1.1.4 It stores one aspect of the entity being entered into the database and is the physical data that are stored in the computer's memory. (1)
- 4.1.1.5 It is similar to a manual filing system that aims to record data, store data, maintain the integrity of the data and process the data into useful information. (1)

- 4.1.2 Name four (4) components of a database system. (4)

- 4.2 "The architecture of a database system is divided into three different levels."

Required:

- 4.2.1 Name the three (3) levels of a database system. (3)
- 4.2.2 Which level is responsible for the physical storage of the data? (1)

**[13]****QUESTION 5 (12 marks)****REVENUE CYCLE'S BILLING SYSTEM**

"In the billing process the sales order is converted to a sales invoice after the customer signed for the delivery of the goods. The sales invoice is then sent to the customer for payment. The update of the invoices affects numerous history-, master- and general ledger files."

Required:

- 5.1 List two (2) history and two (2) master files which will be affected in the above process. (4)
- 5.2 List two (2) general ledger files which will be affected in the above process. (2)
- 5.3 List four (4) typical reports which you will print to evidence the above entry. (4)
- 5.4 Indicate what will happen with the sales order after being converted to a sales invoice. (1)
- 5.5 Which file will show all the relevant outstanding invoices? (1)

**[12]****[TURN OVER]**

**QUESTION 6 (8 marks)****TRANSACTION PROCESSING**

"Monetary transactions posted through journals are stored in the appropriate ledger accounts. General ledgers are records of final accounts and therefore reflect the summary of all transactions."

Four type of files represent accounting records:

- Master files
- Transactions files
- Reference files
- History files.

Required:

Briefly describe each of the above files.

(8)

[8]

**QUESTION 7 (6 marks)****FINANCIAL MANAGEMENT CYCLE**

At the end of the financial year you need to run the year-end procedures. This process is fully automated, and prepares the system for processing in the new financial year. During the procedure, relevant account balances and budgets are transferred, transactions deleted, date parameters changed, etc.

Required:

List the six (6) controls the system will perform before executing the year-end procedures.

(6)

[6]

**[TURN OVER]**

**QUESTION 8 (13 marks)**

The following spreadsheet is presented to you with the salaries of Good Health (Pty) Ltd:

	A	B	C	D	E	F
1	EMPLOYEE	GROSS SALARY (R)	DEDUCTION (R)	NET SALARY (R)		
2	IWISI	200 000	45 000	?		
3	DULAMO	115 000	30 000	?		
4	JONKER	202 000	140 000	?		
5	KOK	103 000	22 000	?		
6	NDLOVU	120 000	35 000	?		
7	NAIDOO	312 000	121 000	?		
8	TOTAL			=SUM(D2:D7)		
9						
10	Lowest gross salary				=MIN(B2:B7)	
11	Average net salary				=AVERAGE(D2:D7)	
12	Percentage deduction of gross salary of Iwisi				=C2/B2*100	
13						
14						
15						

**Required:**

Use the information displayed in the spreadsheet to answer the following questions:

- 8.1 Which spreadsheet formula should be entered into cell D6 to calculate the net salary of Ndlovu? (2)
- 8.2 Which spreadsheet formula should be entered into cell D8 to calculate the total of employees' net salaries? (2)
- 8.3 Which spreadsheet formula should be entered into cell E10 to calculate the lowest gross salary? (2)
- 8.4 Which spreadsheet formula should be entered into cell E11 to calculate the average net salary for all employees? (2)
- 8.5 Which spreadsheet formula should be entered into cell E12 to calculate the percentage of the deduction in comparison to the gross salary of Iwisi? (2)
- 8.6 List three (3) type of charts that is available in Excel to display data in a graph. (3)

Pie  
Line  
Bar

**[13]****[TURN OVER]**

**QUESTION 9 (16 marks)****EXCEL SPREADSHEETS**

Design a formula for each of the following statements when using an Excel spreadsheet:

- 9.1 Determine the highest amount in the range A1 to H300.  $=\text{Max}(A1:H300)$  (2)
- 9.2 If the entry in cell address G1 is greater than 1000, then cell address G1 must be multiplied by cell address G5, otherwise the value in the cell address must be equal to 0.  $=\text{If}(G1 > 1000, G1 * G5, 0)$  (4)
- 9.3 Add the values of cell addresses A1 to A100 and subtract the total of cell addresses F1 to F500 from it.  $=\text{Sum}(A1:A100) - \text{Sum}(F1:F500)$  (4)
- 9.4 If cell A1 with the formula " $= A2 + A3$ " is copied to cell B4. What would the formula be in cell B4?  $"= B2 + B3"$  (2)
- 9.5 What must the formula be in A1 (refer to statement in 9.4) if the formula is copied to D4 but it must still give the same answer of A2 + A3? (4)

	A	B	C	D	E	F	G	H
1	1000	1000						
2	10							
3	20							
4	10	$=A2 + A3$						
5	10	$B5 + B6$						

$$= \text{Sum}(A1:A100) - \text{Sum}(F1:F500)$$