AIN2601

PRACTICAL ACCOUNTING DATA PROCESSING

Duration 2 Hours 100 Marks

EXAMINATION PANEL AS APPOINTED BY THE DEPARTMENT

Use of a non-programmable pocket calculator is permissible

Closed book examination

This examination question paper remains the property of the University of South Africa and may not be removed from the examination venue
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THIS EXAMINATION PAPER CONSISTS OF SEVENTEEN (17) 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 book.
4. Answer books may not be completed in pencil.
5. This paper consists of the following six (6) questions

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>TOPIC</th>
<th>MARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Short questions (Multiple choice)</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Short questions (Missing word)</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Data management and utilisation, Management reporting systems</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>Transaction processing</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Transaction processing</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>Spreadsheets</td>
<td>33</td>
</tr>
</tbody>
</table>

100

[TURN OVER]
QUESTION 1  (8 marks)

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

1 1 Which one of the following is NOT an example of a type of output generated by the management information system (MIS)?

(A) Scheduled report
(B) Batch report
(C) Demand report
(D) Exception report

1 2 A data _________ is a smaller data warehouse extracted from the main data warehouse and contains specific related data extracted for a specific organisational user group

(A) cell
(B) record
(C) field
(D) mart

1 3 ____________ input involves data being immediately captured into the computer information system (CIS) at the point where the activity occurs, whereas batch input involves similar source documents being grouped together and then entered in the CIS periodically

(A) Automatic
(B) Interactive
(C) Online
(D) Real-time

1 4 When investigating individual accounting information systems (AIS), the flexibility of the AIS must be considered. If the AIS is flexible it means ____________.

(A) the software can grow with the organisation
(B) the software is easy to understand and use
(C) the software can be tailored to the organisation's needs
(D) the software meets the organisation's requirements

1 5 Which one of the following is NOT an advantage of using a database environment?

(A) Reduced data redundancy
(B) Easy to design and use
(C) Improved data integrity
(D) Improved information security

[TURN OVER]
**QUESTION 1** (continued)

16 Which one of the following needs to be considered when determining the general accounting information system (AIS) requirements?

(A) Requirement matching  
(B) Hardware requirements  
(C) Implementation period  
(D) Country suitability

17 Which one of the following is NOT a factor to consider when investigating a new individual accounting information system (AIS)?

(A) Requirement analysis  
(B) Support and training  
(C) Software vendor  
(D) Documentation quality

18 A data administrator can best be described as the database user

(A) capturing data in the database and extracting information from the database using database management system software  
(B) responsible for managing and controlling the organisation’s databases  
(C) creating, maintaining, updating and managing the application and database management software  
(D) responsible for managing and controlling the data in the organisation’s database
QUESTION 2  (8 marks)

COMPLETE THE FOLLOWING STATEMENTS BY INSERTING THE CORRECT WORD(S). WRITE DOWN THE QUESTION NUMBER AND THE CORRECT WORD(S) ONLY. EACH CORRECT ANSWER COUNTS ONE (1) MARK

2 1 Thanks to __________, different reporting languages are no longer a challenge because tags are allocated to numbers, making the comparison of financial results much easier

2 2 When developing a chart of accounts (CoA), it is important to obtain __________ from applicable management on the final chart of accounts before implementing it

2 3 Business intelligence software (BIS) is special software that combines information obtained from a __________, from all functional areas from the organisation and external sources to a lesser extent to generate reports required by top management

2 4 A data __________ contains a single data value and is the smallest unit of data that can be accessed in a database

2 5 Online analytical processing is mainly used to __________ data, say, per month and per region, the number of vehicles sold to persons aged 30 and 40 years

2 6 Valuable information can be described as __________ if it can be traced and agreed to various sources

2 7 The database users use different database languages to interact with the database and the __________ language controls the security and user access to the database objects and data in the database

2 8 Accounting information system (AIS) vendors have segmented their accounting software A(n) __________ AIS includes basic features, usually has one-user access and generally does not provide for segregation of duties

[8]
QUESTION 3  (18 marks)

InShape Ltd owns thirty (30) gymnasiums (gyms) across South Africa. These gyms provide various services including spinning classes, personal training and weight lifting.

InShape offers two types of membership options:

- **Option 1** Allows the member access to a specific gym only and is referred to as ‘limited access’.
- **Option 2** Allows the member access to all thirty gyms across the country and is referred to as ‘unlimited access’

**Access to gyms is regulated as follows:**
When a person signs up for membership, an access card with a magnetic strip containing his/her unique personal details is issued. When the member visits the gym, his/her card is presented at the entrance to the reception personnel. Upon presenting the card, the reception personnel immediately has access to the database where it is stored what type of membership option is applicable to the specific member. Access to the gym is only granted according to the member’s membership option. However, should a member with 'limited access' membership wish to visit a gym different to the gym stipulated in his/her membership contract, he/she will be granted access by reception personnel under the conditions that his/her details can be located on the database upon presenting the access card and then paying an additional once-off fee.

In order to be able to enforce access control as described above, the reception personnel of all thirty gyms have access to the whole original database. InShape therefore makes use of a distributed database.

**Loyalty programme:**
InShape has implemented a point system whereby members earn points for living a healthy lifestyle. Points can be earned for making healthy choices e.g., eating five fruits a day or drinking eight glasses of water a day. For every visit to the gym a member can earn five points.

**Data processing:**
InShape uses five methods of processing data into information.

The following is an extract from the database files and output reports that were generated from InShape’s database.

**Master file**

<table>
<thead>
<tr>
<th>Membership number</th>
<th>Member’s name</th>
<th>Type of membership</th>
<th>Specific gym</th>
<th>Points earned for the year (2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7812452356147</td>
<td>J Plaatjes</td>
<td>Limited access</td>
<td>Moreleta</td>
<td>120</td>
</tr>
<tr>
<td>7976141235879</td>
<td>K Mathaba</td>
<td>Unlimited access</td>
<td>All</td>
<td>80</td>
</tr>
<tr>
<td>8003150456078</td>
<td>N Govender</td>
<td>Unlimited access</td>
<td>All</td>
<td>65</td>
</tr>
<tr>
<td>8042131458785</td>
<td>C Poggenpoel</td>
<td>Limited access</td>
<td>Faerie Glen</td>
<td>59</td>
</tr>
</tbody>
</table>

[TURN OVER]
QUESTION 3 (continued)

Transaction file

<table>
<thead>
<tr>
<th>Membership number</th>
<th>Points per visit</th>
<th>January 2015</th>
<th>February 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number of visits</td>
<td>Points earned</td>
</tr>
<tr>
<td>7812452356147</td>
<td>5</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>7976141235879</td>
<td>5</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>8003150456078</td>
<td>5</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td>8042131458785</td>
<td>5</td>
<td>6</td>
<td>30</td>
</tr>
</tbody>
</table>

Report

<table>
<thead>
<tr>
<th>Month</th>
<th>Limited access</th>
<th>Unlimited access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-15</td>
<td>2042</td>
<td>1563</td>
</tr>
<tr>
<td>Feb-15</td>
<td>2167</td>
<td>1425</td>
</tr>
<tr>
<td>Mar-15</td>
<td>1987</td>
<td>1368</td>
</tr>
</tbody>
</table>


Member’s names

[TURN OVER]
QUESTION 3 (continued)

Required:

Refer to the provided case study information and answer the following questions

3.1 Briefly define the following
   3.1.1 Centralised database (1)
   3.1.2 Distributed database (2)

3.2 InShape is uncertain about the finer details with regard to distributed databases
   3.2.1 List the two (2) types of distributed databases (1)
   3.2.2 Identify which one (1) of the two types of distributed databases as listed in 3.2.1 is used
       by InShape and motivate your answer (2)

3.3 Refer to the provided case study information. Use the provided table format to answer
       questions 3.3.1 and 3.3.2

<table>
<thead>
<tr>
<th>3.3.1 Type of processing method</th>
<th>3.3.2 Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td></td>
</tr>
</tbody>
</table>

3.3.1 Different methods are used to process data into information. Refer to the provided case study
       information and identify four (4) processing methods used. List these processing methods in
       the first column of the table (4)

3.3.2 Refer to the provided case study information and for each processing method identified in 3.3.1
       provide one (1) example. List these examples in the second column next to the corresponding
       processing method (4)

3.4 List four (4) factors influencing the staffing level requirements of the organisation's finance
       team (4)

[18]

[TURN OVER]
QUESTION 4 (20 marks)

You are the financial manager of SoGreen Ltd, a manufacturer and retailer of lawnmowers. You have received the e-mail from SoGreen's auditors

SoGreen -mailbox

From: Ondela Smit
Sent: 15 January 2016
To: finman@sogreen.co.za
Subject: Background information

Dear Financial Manager

My name is Ondela Smit, a first year audit clerk at Tickbox Auditors. The 2016 mid-year review of SoGreen is almost upon us. We have already started planning for the review and our pre-engagement activities revealed the following:

1) SoGreen has upgraded their accounting information system (AIS) and is now using Pastel Partner version 12 (Pastel). As a result of the upgrade a new company was created and set-up on Pastel Partner.

2) The previous year's audited trial balance was correctly captured in this newly created company.

3) SoGreen has also migrated to a computerised production cycle.

With that said, we would greatly appreciate your input regarding:

- basic company information that you have gathered before creating the new SoGreen company in Pastel.
- common defaults set-up, such as suppliers early payment terms.
- "contra in detail" set-up.
- bill of materials (BOM) and material resource planning (MRP) used in the computerised production cycle.
- SoGreen's take-on journal entries.

Kind Regards
Ondela Smit
084 123 4567

[TURN OVER]
QUESTION 4  (continued)

Required:
Please refer to the provided case study (e-mail from the auditors) to answer questions 4.1 to 4.6.

4.1 List five (5) basic company information that was gathered before the new SoGreen company was created (set-up) in Pastel (5)

4.2 Provide two (2) reasons why it is important to set up common defaults (2)

4.3 Name the database file in which the credit limit for a supplier will be stored? (1)

4.4 Briefly explain what the impact is if “Contra in Detail” is selected during the setup of entry types (1)

4.5 With regard to a computerised production cycle, briefly define

4.5.1 Bill of materials (BOM) (1)

4.5.2 Material resource planning (MRP) (2)

4.6 Ondela came back still unsure about the take-on journal entries principle for the following general ledger accounts

<table>
<thead>
<tr>
<th>Extract from the take-on trial balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>General ledger account</td>
</tr>
<tr>
<td>Retained income</td>
</tr>
<tr>
<td>Theba bank account</td>
</tr>
<tr>
<td>Inventory control</td>
</tr>
<tr>
<td>Supplier control</td>
</tr>
</tbody>
</table>

Draw the table below in your answer book. For the general ledger accounts listed above, use this table to record the take-on opening balances journal entries as processed by you in Pastel.

You only need to provide the journal entries for the general ledger accounts provided above. Please note that the journal must balance.

<table>
<thead>
<tr>
<th>General ledger account description</th>
<th>Debit/Credit</th>
<th>Amount (R’000)</th>
</tr>
</thead>
</table>

Tip: draw the T-accounts for yourself as rough work in your answer book to help ensure your debits and credits are correct and that the journal balances (8)

[20]

[TURN OVER]
QUESTION 5  (13 marks)

SoGreen Ltd is a manufacturer of and retailer in lawnmowers. They use Pastel Partner to record their business transactions. Their 2016 financial year end is on the last day of May 2016. **SoGreen is a registered VAT vendor** and they use open item processing for all customer and supplier accounts.

The below screen print relates to full and final settlement of outstanding amount of R157 629 paid by SoGreen to Sunque Supplies on 07 October 2015.

---

**Educational No SoGreen 123456789 (SOGREEN)**

File - Edit - Process - View - Change - Setup - Utility - Window - Help

---

**Open Item Matching Tela Bank Payments**

<table>
<thead>
<tr>
<th>Account - SUS333 - Sunque Supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reference</strong></td>
</tr>
<tr>
<td>Q155</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Invoice</th>
<th>Date</th>
<th>Invoice Amount</th>
<th>Amount Due</th>
<th>Discount</th>
<th>Total Due</th>
<th>Amount Matched</th>
</tr>
</thead>
<tbody>
<tr>
<td>5975</td>
<td>29/08/2015</td>
<td>45 900 90</td>
<td>45 900 90</td>
<td>45 900 90</td>
<td>45 900 90</td>
<td></td>
</tr>
<tr>
<td>5911</td>
<td>25/09/2015</td>
<td>98 051 00</td>
<td>98 051 00</td>
<td>98 051 00</td>
<td>98 051 00</td>
<td></td>
</tr>
<tr>
<td>5916</td>
<td>30/09/2015</td>
<td>13 678 00</td>
<td>13 678 00</td>
<td>13 678 00</td>
<td>13 678 00</td>
<td></td>
</tr>
</tbody>
</table>

---

**Required:**

Please refer to the case study information and screen print from Pastel Partner Version 12 above to answer questions 5.1 to 5.4.

5.1 In which **accounting period** was this transaction captured? List only the period number

5.2 Give one (1) example of a foreign key included in the screen print above.

5.3 Draw the provided table in your answer book and use this table to answer the question.

<table>
<thead>
<tr>
<th>Early payment terms</th>
<th>Discount to match</th>
<th>Amount to match i.e. Bank amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>531 5% within 10 days from period end</td>
<td>(2)</td>
<td>(1)</td>
</tr>
<tr>
<td>532 5% within 10 days from invoice date</td>
<td>(2)</td>
<td>(1)</td>
</tr>
</tbody>
</table>

With regards to the payment, calculate the amounts that will reflect in the **Amount to Match** (i.e. Bank amount) and **Discount to Match** (if applicable) fields based on the different early payment terms as indicated in the provided table. Show the detail of your calculations as part of your answer.

---

[TURN OVER]
QUESTION 5 (continued).

5 4 Which Pastel Partner main menu will you use for the following procedures?

5 4 1 Print a bank reconciliation (1)
5 4 2 Convert a customer from open item to balance forward processing (1)
5 4 3 Update an inventory item's maximum reorder level (1)
5 4 4 Print an item based price list (1)
5 4 5 Capture common default data for all suppliers (1)
THE FOLLOWING IS APPLICABLE TO QUESTION 6

- Please leave a line open after each individual answer
- You used the Excel Help function to obtain the following formula structures which might come in handy when answering question 6
  - =VLOOKUP(lookup_value,table_array,col_index_num,range_lookup)
  - =PMT(rate,nper,pv,fv,type)
  - =FV(rate,nper,pmt,pv,type)
  - =PV(rate,nper,pmt,fv,type)

PREMIUM PROPERTY REAL ESTATE (PPRE)

PPRE is a Limpopo based real estate agency that specialises in selling both residential and commercial properties on behalf of property owners. There are two types of residential properties i.e. Affordable House-Properties (AH) and Up-Market Properties (UP). The agency prides itself with a number of highly motivated, passionate and award-winning agents driving its operations.

PPRE was recently identified for a VAT audit by the Revenue Authorities (RA). Immediately after the audit, Thabo Moeng (the Managing Director) showed one of his senior estate agent (Ms. Sam Greed) the door following the below audit findings from the RA:

- Ms. Sam Greed only represents non-VAT vendors and should therefore not charge VAT on any of her property deals
- Ms. Sam Greed's property portfolio only attracts transfer duty
- Transfer duty was correctly calculated and paid over to the RA on all of Ms. Sam Greed previous deals
- The "Transfer duty table" as reflected in Ms. Sam Greed property portfolio is valid and accurate
- Ms. Sam Greed has been unlawfully charging VAT on all of her property deals and secretly transferring the collected funds to her partner's personal account

Thabo conceded that as a "star performer" Sam was allowed to perform her duties with minimum assistance from him. Sam's unforeseen departure left him in the doldrums and his immediate challenge is to make sense of Sam's property portfolio (see next page) and start managing the portfolio himself. Knowing and trusting your Excel skills, Thabo needs your help in understanding Sam's portfolio.

[TURN OVER]
**QUESTION 6 (continued)**

<table>
<thead>
<tr>
<th>Location table</th>
<th>Province Code</th>
<th>Province Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>Gauteng</td>
<td></td>
</tr>
<tr>
<td>ZN</td>
<td>Kwa-Zulu Natal</td>
<td></td>
</tr>
<tr>
<td>WC</td>
<td>Western Cape</td>
<td></td>
</tr>
<tr>
<td>OT</td>
<td>Other Provinces</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deposit percentage table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Property Type</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Affordable House-Properties</td>
</tr>
<tr>
<td>Up-Market Properties</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transfer duty table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Limit</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>R 0</td>
</tr>
<tr>
<td>R 500 001</td>
</tr>
<tr>
<td>R 1 500 001</td>
</tr>
<tr>
<td>R 3 500 001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STANDING DATA</th>
<th>PROPERTY 1</th>
<th>PROPERTY 2</th>
<th>PROPERTY 3</th>
<th>PROPERTY 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property code</td>
<td>UP-ERF0015-1200GP</td>
<td>AH-ERF1245-0355WC</td>
<td>UP-ERF0008-2150ZN</td>
<td>AH-ERF1028-0375OT</td>
</tr>
<tr>
<td>Province code</td>
<td>GP</td>
<td>WC</td>
<td>ZN</td>
<td>OT</td>
</tr>
<tr>
<td>Province name</td>
<td>Gauteng</td>
<td>Western Cape</td>
<td>Kwa-Zulu Natal</td>
<td>Other Provinces</td>
</tr>
<tr>
<td>Property size in m²</td>
<td>1200</td>
<td>0355</td>
<td>2150</td>
<td>0375</td>
</tr>
<tr>
<td>&quot;Prop-Man&quot; code</td>
<td>GP-1200</td>
<td>WC-0355</td>
<td>ZN-2150</td>
<td>OT-0375</td>
</tr>
<tr>
<td>Property type code</td>
<td>UP</td>
<td>AH</td>
<td>UP</td>
<td>AH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FINANCIAL DATA</th>
<th>PROPERTY 1</th>
<th>PROPERTY 2</th>
<th>PROPERTY 3</th>
<th>PROPERTY 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price (incl. VAT)</td>
<td>R 2 950 000</td>
<td>R 423 370</td>
<td>R 6 250 000</td>
<td>R 500 000</td>
</tr>
<tr>
<td>Selling price (excl. VAT)</td>
<td>R 2 587 719</td>
<td>R 370 500</td>
<td>R 5 482 456</td>
<td>R 438 596</td>
</tr>
<tr>
<td>Deposit amount</td>
<td>R 388 158</td>
<td>R 18 525</td>
<td>R 822 368</td>
<td>R 21 930</td>
</tr>
<tr>
<td>Transfer duty rate</td>
<td>9.50%</td>
<td>4.25%</td>
<td>11.50%</td>
<td>4.25%</td>
</tr>
<tr>
<td>Transfer duty amount</td>
<td>R 245 833</td>
<td>R 15 746</td>
<td>R 630 482</td>
<td>R 18 640</td>
</tr>
<tr>
<td>Financed amount (excl. VAT)</td>
<td>R 2 445 365</td>
<td>R 367 721</td>
<td>R 5 290 570</td>
<td>R 435 307</td>
</tr>
<tr>
<td>Agency cost</td>
<td>R 148 794</td>
<td>R 21 304</td>
<td>R 315 241</td>
<td>R 25 219</td>
</tr>
<tr>
<td>Agency income</td>
<td>R 189 712</td>
<td>R 27 162</td>
<td>R 401 933</td>
<td>R 32 155</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INSTALLMENT DATA</th>
<th>PROPERTY 1</th>
<th>PROPERTY 2</th>
<th>PROPERTY 3</th>
<th>PROPERTY 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance term in years</td>
<td>20</td>
<td>30</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Interest rate (per annum)</td>
<td>9.75%</td>
<td>13.50%</td>
<td>8.50%</td>
<td>12.85%</td>
</tr>
<tr>
<td>Monthly installment</td>
<td>R 23 195</td>
<td>R 4 212</td>
<td>R 40 680</td>
<td>R 5 054</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KEY INDICATORS</th>
<th>PROPERTY 1</th>
<th>PROPERTY 2</th>
<th>PROPERTY 3</th>
<th>PROPERTY 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price m² (excl VAT)</td>
<td>R 2 156</td>
<td>R 1 044</td>
<td>R 2 550</td>
<td>R 1 170</td>
</tr>
<tr>
<td>Lowest price per m² (excl VAT)</td>
<td>R 1 044</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average finance term (years)</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[TURN OVER]
QUESTION 6 (continued)

Thabo provided you with the following additional information applicable to his questions.

a. Your advice should take into account the audit findings identified by Revenue Authorities.

b. All amounts on the spreadsheet for Sam’s Property Portfolio were formatted to display zero decimal digits and all percentages to display two decimal digits.

c. Where applicable the Value Added Tax (VAT) rate is 14% (refer to cell B2).

d. The markup-margin is 27.5% (refer to cell B4).

e. As per the Deposit percentage table, all property buyers are required to pay a non-negotiable cash deposit (refer to point n) per below:
   - 5% of selling price excluding VAT for all affordable houses (AH) (refer to cell C10), or
   - 15% of selling price excluding VAT for all up-market properties (UP) (refer to cell C11).

f. Properties in Sam’s portfolio are situated country-wide and across different provinces. The location table, starting in cell D2, indicates the province code and the corresponding province name.

g. The transfer duty table, starting in cell A13, indicates the rates used to calculate transfer duties (refer to point o). Transfer duties are based on the property’s selling price excluding VAT. For example a property with a selling price of R600 000 excluding VAT will attract transfer duty at a rate of 7.5% as it falls within the R500 001 to R1 500 000 bracket.

STANDING DATA

h. The property code is a combination of alpha-numeric characters making-up a unique identifying code for each property in the portfolio (refer to row 21).

The property code structure is as follows:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>P</td>
<td>-</td>
<td>E</td>
<td>R</td>
<td>F</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>G</td>
<td>P</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Stand number</th>
<th>Property size in square meters (m²)</th>
<th>Province code</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Characters 1-2</th>
<th>Residential property type (also refer to point k below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character 3</td>
<td>- (hyphen/dash)</td>
</tr>
<tr>
<td>Characters 4-10</td>
<td>Stand number of the property</td>
</tr>
<tr>
<td>Character 11</td>
<td>- (hyphen/dash)</td>
</tr>
<tr>
<td>Characters 12-15</td>
<td>Property size of the property in square meters (m²)</td>
</tr>
<tr>
<td>Characters 16-17</td>
<td>Province code of the property (also refer to point f above)</td>
</tr>
</tbody>
</table>

i. The property size in square meters (m²) (refer to row 24 and point h).
QUESTION 6 (continued)

j  "Prop-Man" code (refer to row 25) is a unique code used in PPRE's accounting package to track and identify properties within the accounting records.

The code is structured as follows:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G</td>
<td>P</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Province code</td>
<td>Property size in square meters (m²)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

k  The property type code (refer to row 26) indicates if a property is either an affordable house (AH) or an up-market property (UP).

FINANCIAL DATA

l  The property selling price including VAT (refer to row 28)

m  The property selling price excluding VAT (refer to row 29)

n  The deposit amount (refer to row 30) is calculated using the applicable rate (refer to point e above)

o  The transfer duty rate (refer to row 31) is retrieved from the transfer duty table (refer to point g above)

p  The transfer duty amount (refer to row 32) is calculated as the transfer duty rate multiplied by the selling price excluding VAT

q  The financed amount excluding VAT (refer to row 33) is calculated by deducting the deposit amount from the selling price (excluding VAT) and then adding the transfer duty amount

r  The agency cost excluding VAT (refer to row 34) relates to cost incurred by PPRE in executing the property sale on behalf of the seller

s  The agency income excluding VAT (refer to row 35) is PPRE's income earned based on the agency cost (refer to point r) and the mark-up margin (refer to point d and cell B4)
QUESTION 6 (continued)

INSTALLMENT DATA

1. A mortgage bond will be registered at a value equal to “Financed amount excluding VAT” of the property being financed.

u. **Monthly installment** (refer to row 39) refers to the monthly installment payable on the mortgage bond raised, taking into account the following terms:

- Financed amount excluding VAT (refer to row 33 and point q above)
- Finance term in years applicable to the specific property (refer to row 37)
- **Annual** interest rate applicable to the specific property (refer to row 38)
- All installments are paid at the end of each month.
- At the end of the finance term all mortgage bonds will be fully repaid.

KEY INDICATORS

v. **Price per square meter excluding VAT** (refer to row 41) is calculated as selling price excluding VAT divided by property size in square meters (m²) (refer to point i above).

w. **Lowest price per square meter excluding VAT** (refer to cell B42) is based on price per square meter excluding VAT for all the properties in Sam’s portfolio.

x. **Average finance term (years)** (refer to cell B43) is based on finance terms in years for all the properties in Sam’s portfolio.

REQUIRED:

Use the provided additional information and Sam's property portfolio to answer following questions:

**Note**: Where it is indicated that your formula will be copied to other cells, your formula must take absolute and relative addresses into account, but only where necessary.

6.1 Which spreadsheet formula was entered into cell B22 to extract Property 1’s province code from the property code?

**Note**: Your formula will be copied to cells C22:E22 (2.0)

6.2 Which spreadsheet formula was entered into cell B23 to retrieve Property 1’s province name from the location table?

**Note**: Your formula will be copied to cells C23:E23. (3.5)

6.3 Which spreadsheet formula was entered into cell B24 to extract Property 1’s square meter (m²) size from the property code?

**Note**: Your formula will be copied to cells C24:E24. (2.5)

6.4 Which spreadsheet formula was entered into cell B25 to create Property 1’s “Prop-man” code?

**Note**: Your formula will be copied to cells C25:E25. (2.5)

6.5 Which spreadsheet formula was entered into cell B29 to calculate Property 1’s selling price excluding VAT?

**Note**: Your formula will be copied to cells C29.E29. (1.5)

[TURN OVER]
**QUESTION 6**  (continued)

6 6 Which spreadsheet formula was entered into cell B30 to calculate Property 1's deposit amount from the Deposit percentage table?
   
   **Note:** Your formula will be copied to cells C30:E30

6 7 Which spreadsheet formula was entered into cell B31 to retrieve Property 1's transfer duty rate from the transfer duty table?
   
   **Note:** Your formula will be copied to cells C31:E31

6 8 Which spreadsheet formula was entered into cell B33 to calculate Property 1's financed amount excluding VAT?
   
   **Note:** Your formula will be copied to cells C33:E33

6 9 Which spreadsheet formula was entered into cell B35 to calculate Property 1's agency income?
   
   **Note:** Your formula will be copied to cells C35:E35

6 10 Which spreadsheet formula was entered into cell B39 to calculate Property 1's monthly installment amount? The formula should return a positive answer.
   
   **Note:** Your formula will be copied to cells C39:E39

6 11 Which spreadsheet formula was entered into cell B41 to calculate Property 1's price per square meter (m²) excluding VAT? The formula should round the answer to zero digits.
   
   **Note:** Your formula will be copied to cells C41:E41.

6 12 Which spreadsheet formula was entered into cell B42 to calculate the lowest price per square meter (m²) excluding VAT for the whole portfolio?

6 13 Which spreadsheet formula was entered into cell B43 to calculate average finance term in years for the whole portfolio?

   
Total [100]

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