QUESTION 1 (7 marks)

1.1. D  SG 1, study unit 2, par 5.2
1.2. B  SG 1, study unit 2, par 6.3
       SG 2, study unit 8, par 2.4
1.3. A  SG 1, study unit 6, par 3
1.4. A  SG 1, study unit 2, par 5.3
1.5. C  SG 2, study unit 8, par 2.4
1.6. B  SG 2, study unit 14, par 3.2
1.7. D  SG 2, study unit 15, par 5.5

QUESTION 2 (9 marks)

2.1. bill of materials/ BOM  SG 2, study unit 10, par 3.2
2.2. partitioned  SG 1, study unit 2, par 6.2
2.3. available  SG 2, study unit 9, par 3
2.4. credit note or return credit note or customer goods returned note
       SG 2, study unit 8, par 3
2.5. set up/create common defaults  SG 2, study unit 7, par 5
2.6. data mining  SG 1, study unit 3, par 5
2.7. data warehouse  SG 1, study unit 4, par 3
2.8. data record or tuple  SG 1, study unit 2, par 6.3
2.9. classifying (data)  SG 1, study unit 1, par 4.1
QUESTION 3 (18 marks)

3.1 Any 4
- Don’t share the password with anyone ✓
- Don’t write the password down and place it where people can find it ✓
- Don’t use obvious password that can easily be guessed like birthdays or names ✓
- Make use of a combination of letters and numbers ✓
- Include uppercase and lowercase letters, numbers, and symbols in the password ✓
- Use numbers to represent letters for instance, 3 for an E and 1 for an i ✓
- Passwords should be 8 or more characters in length ✓
- Change passwords regularly if needed ✓

(4 maximum)

SG 1, study unit 6, par 3

3.2

<table>
<thead>
<tr>
<th>Type</th>
<th>Reason (The reason must be applicable to the case study information)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input: (3.2.1) Batch ✓</td>
<td>Data is collected and captured into the database weekly ✓</td>
</tr>
<tr>
<td>Processing: (3.2.2) Batch ✓</td>
<td>The transaction file is updated to the masterfile at the end of the month ✓</td>
</tr>
<tr>
<td>Output: (3.2.3) Interactive ✓</td>
<td>Users will connected directly to the database ✓ and users must be able to request information themselves ✓</td>
</tr>
</tbody>
</table>

(6)

SG 1, study unit1, par 3-5

3.3 Is a unique data field ^ that can be used to uniquely identify each data record ^ (1)

SG 1, study unit1, par 6.3

3.4 Identification number (ID number) ✓ (1)
QUESTION 3 (continue)

3.5 Any 3

- Implement and maintain database management standards and conventions. ✓
- Ensure applications software complies to database management standards and conventions by establishing programming standards. ✓
- Define the database structures. ✓
- Design and create databases in line with database management standards and conventions ✓
- Implement, maintain and evaluate database access policies and security controls. ✓
- Monitor data and database security and access. ✓
- Monitor and maintain database performance ✓

(3 maximum)
SG 1, study unit 2, par 4.3

3.6.1 Object-oriented model

In an object-oriented model, the data and the operations to be performed on the data are both stored in the database ✓ This database model can furthermore store and process a wider range of data types than only text and numerical data ✓ it also stores and processes images, audio and video data^.

(1 maximum)
SG 1, study unit 2, par.6.1

3.6.2 Multidimensional model

A multidimensional model is similar to a relational model, but whereas a relational model stores data in a two-dimensional table, a multidimensional model stores data in a three- or more dimensional table ✓ creating a cube-like data structure ✓

(1 maximum)
SG 1, study unit 2, par.6.1

3.6.3 Relational model

In a relational model, data is stored in two-dimensional rows and columns ✓ (i.e. tables).

(1)
SG 1, study unit 2, par.6.1
QUESTION 4  (23 marks)

4.1.1 Process menu ✓
4.1.2 Setup menu ✓
4.1.3 Edit menu ✓
4.1.4 Change menu ✓
4.1.5 File menu ✓

4.2 Pastel Partner allows up to ten (10) price lists. (1)

4.3 You can create up to 99 customer categories. (1)
[Pastel manual – 2012 – Lesson 5, page 2]

4.4.1 M ✓
4.4.2 E ✓
4.4.3 D ✓
4.4.4 I ✓
4.4.5 C ✓

[Pastel manual – 2012 – Lesson 2, page 23]

4.5 **Net value** of sales invoice:

\[
\text{R800.00 (price) x 2 (quantity) x 1.14 (VAT) \times 0.95 (invoice discount 5\%) = R1,732.80}
\]

(4 maximum)

**Amount to be paid** for full settlement of account:

\[
\text{R1,732.80 (net sales invoice) x 0.90 (10\% early payment discount) = R1,559.52}
\]

(2)
QUESTION 4 (continue)

4.6.1 The bank opening balance must be captured in the cashbook against the suspense account 9990/001 to ensure the opening balance reflects on the bank reconciliation and clear the take-on suspense.
Pastel only allows us to see transactions entered via the cash book on the bank reconciliation. If we were to use the bank account 8400/000 the trial balance would balance, but we will not be able to do a bank reconciliation for the cash book.

(2 maximum)
(SG 2, study unit 18, par 2.4)

4.6.2 The reconciling items were already processed in the previous financial year and are therefore already included in the take-on opening balance. These cheques and receipts (outstanding items) must be visible when doing the bank reconciliation but without affecting the opening bank/cash book balance. We need to debit everything that we credit, so that there is no impact on the balance (or we therefore use the 8400/000 account for both the debit and credit entry so that there is no impact on the take-on opening balance). We will have to do this debit and credit through the cash book so that it is visible on the bank reconciliation.

(2 maximum)
(SG 2, study unit 18, par 2.4)

4.6.3 The VAT implications have already been taken into account when the transaction occurred or VAT implications have already been taken into the take on opening balance.

(1 maximum)

QUESTION 5 (10 marks)

5.1 (Note: The net effect (dt/ct and amount) is marked if an account was used more than once)

<table>
<thead>
<tr>
<th>General ledger account description</th>
<th>Debit/Credit</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue ^</td>
<td>Credit ^</td>
<td>R 2,000 ✔</td>
</tr>
<tr>
<td>Vat / Tax Control Account ^</td>
<td>Credit ^</td>
<td>R 280 ✔</td>
</tr>
<tr>
<td>Customer control / Accounts receivable/ Trades receivables/Debtors/Hikers Mania ^</td>
<td>Debit ^</td>
<td>R 2,280 ✔</td>
</tr>
<tr>
<td>Cost of sales ^</td>
<td>Debit ^</td>
<td>R 1,500 ✔</td>
</tr>
<tr>
<td>Inventory ^</td>
<td>Credit ^</td>
<td>R 1,500 ✔</td>
</tr>
</tbody>
</table>

[10]
(SG2, study unit 8, par 3)
QUESTION 6 (33 marks)

The following is applicable to the Excel question.

- Functions are marked from left to right.
- The first option is marked where more than one answer for a specific question is given i.e. XXXX or YYYY.
- Where a formula/function is ‘build-up’ the final answer is marked i.e. amounts → cell reference → cell reference with $.
- To earn the applicable mark the cell references (taking the $ into account where applicable) must be exactly the same as indicated on the memorandum.
- If information is given in a cell the answer must refer to that specific cell. E.g. VAT given in a cell – the formula cannot use 14% but must refer to that specific cell reference.

Marks are deducted as follows (per individual question):

(Note: A specific question cannot be awarded less than 0 for a formula.)

<table>
<thead>
<tr>
<th>Description</th>
<th>Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not starting a formula/function with =</td>
<td>-1</td>
</tr>
<tr>
<td>Not using the same function separator (either , or ;) consistently.</td>
<td></td>
</tr>
<tr>
<td>Either the , or ; as can be used as a function separator but it must be used consistently throughout the whole question 6.</td>
<td></td>
</tr>
<tr>
<td>When referring to a range of cells using a ; to indicate the range i.e. A10;D10</td>
<td>-1</td>
</tr>
<tr>
<td>Not using “ ” when working with text</td>
<td>-1</td>
</tr>
<tr>
<td>Using x instead of * or ÷ instead of /</td>
<td>-1</td>
</tr>
<tr>
<td>Logical issue in a formula e.g. multiply where we should divide, subtract where we should add, etc.</td>
<td>-1</td>
</tr>
<tr>
<td>Incorrect use of ( ) or not using it where necessary or not closing brackets</td>
<td>-1</td>
</tr>
<tr>
<td>Using [ ] instead of ( )</td>
<td>-1</td>
</tr>
<tr>
<td>Using SUM in a formula where it is not applicable i.e. =sum(H18 - H23)</td>
<td>-1</td>
</tr>
<tr>
<td>Using a formula when a function is available i.e. =B5+B6+B7 instead of =sum(B5:B7)</td>
<td>-1</td>
</tr>
<tr>
<td>Add an not applicable argument to the end of the function i.e. =Right(A11,1,1)</td>
<td>-1</td>
</tr>
</tbody>
</table>

6.1  =$B3 & ^"123"&^B11^ OR =$B3 & ^123^&^B11^  
$B3 or $B$3 is correct

6.2  =$MID (B11^ ,3^ ,1^)  
6.3  =$B13 * (1 +$B4^ ) OR =$B13 *$B4^ +B13^  
$B4 or $B$4 is correct

6.4  =$VLOOKUP (B11^,$D4^:$E7^,2^ ,FALSE^)  
$D4:$E7 or $D$4:$E$7 is correct

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### QUESTION 6 (continue)

<table>
<thead>
<tr>
<th></th>
<th>Formula</th>
<th>Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.5</td>
<td>((B14-B13))(^*)B15   OR   (=B4^*B13^*B15) OR (=B14^<em>B15^</em>-B13^*B15)</td>
<td>(B4) or (B4) is correct</td>
</tr>
<tr>
<td>6.6</td>
<td>(=B16^)(^<em>)1/(1(^</em>)+$B5))   OR (=$B4^*B13^*B15) OR (=B14^<em>B15^</em>-B13^*B15)</td>
<td>(B5) or (B5) is correct</td>
</tr>
<tr>
<td>6.7</td>
<td>(=\text{ROUND})(^) (SUM(^) (B17:E17),2)</td>
<td>(2)</td>
</tr>
<tr>
<td>6.8</td>
<td>(=\text{IF})((B19^&gt;^B6^,B7^*B19^,B8^*B19)) OR (=\text{IF})((B19^&lt;=^B6^,B8^*B19^,B7^*B19))   OR (=\text{IF})((B6^&lt;=^B19^,B8^*B19^,B7^*B19)) OR (=\text{IF})((B6^&gt;=^B19^,B7^<em>B19^,B8^<em>B19))   OR (=\text{IF})((B6^&gt;=^B19^,B8^,B7^))</em>(B19)   OR (=\text{IF})((B6^&gt;=^B19^,B8^,B7^))</em>(B19)</td>
<td>(4)</td>
</tr>
<tr>
<td>6.9</td>
<td>(-^\text{PMT})(^) (B23(^/)12^,B24^<em>)12^,B21^,10000^,0^) OR (=\text{PMT})(^) (B23(^/)12^,B24^</em>)12^,^-B21^,10000^,0^) OR (=\text{PMT})(^) (B23(^/)12^,B24^<em>)12^,^-B21^,^-10000^,0^) OR (=\text{PMT})(^) (B23(^/)12^,B24^</em>)12^,^-B21^,10000^,0^)*^-1^</td>
<td>(5)</td>
</tr>
</tbody>
</table>

#### 6.10 Error Explanation

<table>
<thead>
<tr>
<th>Error</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#N/A!</td>
<td>6.10.1) This error occurs when a value is not available to a function or a formula. (1)</td>
</tr>
<tr>
<td>#NAME?</td>
<td>6.10.2) This error occurs when Microsoft Office Excel doesn't recognize text in a formula. (1)</td>
</tr>
<tr>
<td>#VALUE!</td>
<td>6.10.3) Appears when you use the wrong type of argument in a function, or the wrong type of operator, or when you call for a mathematical operation that refers to cells that contain text entries. (1 maximum)</td>
</tr>
</tbody>
</table>

(SG 1, study unit 5, par 2.1)

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[33]
Total [100]