**LEARNER SUMMATIVE ASSESSMENT TOOL KNOWLEDGE MODULE 3:**

**KNOWLEDGE COMPONENT: LEARNER SUMMATIVE ASSESSMENT TOOL KNOWLEDGE MODULE 3: SUGAR PROCESSING FACTORY CONTROL CALCULATIONS**

**Occupational Certificate: Sugar Processing Controller**

**LEARNER SUMMATIVE ASSESSMENT TOOL**

**KNOWLEDGE MODULE 3: SUGAR PROCESSING FACTORY CONTROL CALCULATIONS**

**SUGAR PROCESSING FACTORY**

**CONTROL CALCULATIONS**

****

**OCCUPATIONAL CERTIFICATE: ID 97590: SUGAR PROCESSING CONTROLLER**

**©Copyright AgriSETA**

**Telephone: +27 12 301 5600**

****

AgriSETA holds the copyright to its publications and Web pages. Proper citation is requested.

**TABLE OF CONTENTS**

[1. STAKEHOLDER INFORMATION 6](#_Toc8842549)

[2. COMPETENCY SUMMARY OF ASSESSMENT 8](#_Toc8842550)

[3. ASSESSMENT ALIGNMENT MATRIX (INTERGRATED OUTCOMES) 9](#_Toc8842551)

[4. ASSESSMENT DECISION & EVIDENCE EVALUATION RECORD 11](#_Toc8842552)

[5. OVERALL ASSESSMENT DECISION 12](#_Toc8842553)

[6. EVIDENCE OF FEEDBACK 13](#_Toc8842554)

[7. OVERALL RESULTS 14](#_Toc8842555)

[8. ASSESSMENT REVIEW 15](#_Toc8842556)

[9. FINAL DECISION 17](#_Toc8842557)

[10. LEARNER FEEDBACK FORM 18](#_Toc8842558)

[11. SUMMATIVE ASSESSMENT INSTRUCTIONS 19](#_Toc8842559)

[12. WRITTEN ASSESSMENT 20](#_Toc8842560)

[13. FINAL MARKS 27](#_Toc8842561)

1. STAKEHOLDER INFORMATION

|  |  |
| --- | --- |
| **LEARNER INFORMATION** | |
| **Name** |  |
| **Surname** |  |
| **ID number** |  |
| **Mobile phone contact number** |  |
| **E-mail address** |  |
| **Physical address** |  |
| **Postal address** |  |
| **Employer Name** |  |
| **Employer Contact Details** |  |

|  |  |
| --- | --- |
| **ASSESSOR DETAILS** | |
| **Name** |  |
| **Surname** |  |
| **Assessor ID** |  |
| **Project Name** | Occupational Certificate ID 97590:Sugar Processing Controller |
| **Module No.** | **Module 3: Sugar Processing Factory Control Calculations** |
| **Date of Assessment** |  |
| **Portfolio submission Date** |  |
| **Assessor Signature** |  |
| **Total Marks for Knowledge Module 3** | 90 marks |
| **Marks attained** |  |
| **Place:** |  |

|  |  |
| --- | --- |
| **MODERATOR DETAILS** | |
| **Moderator Name** |  |
| **Moderator ID** |  |
| **Moderator Signature** |  |
| **Date of Moderation** |  |

1. COMPETENCY SUMMARY OF ASSESSMENT

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
| **Module 3** | **KM-03-KT01:** Introduction to factory control concepts | **C** | **NYC** |
| **1** | 1.1. Understanding the meaning of factory performance indicators can be demonstrated |  |  |
| **2** | **KM-03-KT02:** Materials balance | **C** | **NYC** |
|  | 2.1. Source of material to be balanced can be explained |  |  |
|  | 2.2. Calculations are correctly performed |  |  |
| **3** | **KM-03-KT03:** Stock taking | **C** | **NYC** |
|  | 3.1. Knowledge of accurate stocking as a component of materials balance can be demonstrated |  |  |
| **4.** | **KM-03-KT04:** Calculations | **C** | **NYC** |
|  | 4.1. Knowledge of formulas and accurate application can be demonstrated. |  |  |

1. ASSESSMENT ALIGNMENT MATRIX (INTERGRATED OUTCOMES)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Module No: 3** | **How it is assessed (Assessment methodology)** | **Where is it covered (learning material)** | **Where it is assessed** | | **First Submission** | | |
| **Summative** | **Formative** |
| **SAQA ID Number:** 97590 | Two methods of assessment are followed which are:  1. Summative assessment: written tests, knowledge questions using fundamental and reflexive questions.  2. Formative assessment: assignments, tasks, portfolio of evidence submitted and presentations. |  |  |  | **Clearly meets all the criteria** | **Meets some but not all criteria** | **Clearly does not meet any of the criteria** |
| **Title:** Sugar processing factory control calculations |  |  |  |
| **NQF level and credits:**  NQF Level 5: 12 Credits |  |  |  |
| **Topic: 1** Introduction to factory control concepts | Page 14 & 21 | Question 3.1—3.3 page 20 | Learning Activity 1.1 page 11-14 |  |  |  |
| Question 3.8-3.9 page 21 |
| **Assessment criteria**: Understanding the meaning of factory performance indicators can be demonstrated | Question 3.10 page 22 |  |  |  |  |
| Question 3.11-3.14 page 13-20 |
| Question 3.17, 3.19&3.20 page 24-25 |
| **Topic 2.** Materials balance |  | Page 22-44 |  | Learning Activity 2.1 page 16-21 |  |  |  |
| **Assessment criteria:**  Source of material to be balanced can be explained |  |  |  |
| **Assessment criteria:** Calculations are correctly performed |  |  |  |  |
| **Topic 3.** Stock taking |  | Page 45-46 | Question 3.4-3.7 page 21-22 | Learning Activity 3.1 page 23-28 |  |  |  |
| **Assessment criteria:**  Knowledge of accurate stocking as a component of materials balance can be demonstrated | Question 3.15-3.16 page 24 |  |  |  |  |
| **Topic 4.** Calculations |  | Page 52-73 |  | Learning Activity 4.1 page 30-41 |  |  |  |
| **Assessment Criteria:** Knowledge of formulas and accurate application can be demonstrated. |  |  |  |  |  |  |  |
|  |  |  |

1. ASSESSMENT DECISION & EVIDENCE EVALUATION RECORD

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Candidate's Name: - | | | | |
| Assessor's Name: - | | | | |
| **Practical assessment**  I declare that this assessment is my own demonstration.  Marks: The learner is either “Met requirements” or “did not meet requirements”. If the learner did not meet requirements in an area, then he or she must be reassessed.  **Learner achieved: Met requirements /Did not meet requirements** | | | | |
| **KNOWLEDGE MODULE 3: SUGAR PROCESSING FACTORY CONTROL CALCULATIONS** | | | | |
| **Overall outcome:** | | | | |
| **Specific Outcome** | | **Met requirements** | **Did not meet requirements** | **Comments** |
| 1 |  |  |  |  |
| **Specific Outcome** | | **Met requirements** | **Did not meet requirements** | **Comments** |
| 2 |  |  |  |  |
|  | **Specific outcome** | **Met requirements** | **Did not meet requirements** | **Comments** |
| 3 |  |  |  |  |
|  | **Specific outcome** | **Met requirements** | **Did not meet requirements** | **Comments** |
| 4 |  |  |  |  |

1. OVERALL ASSESSMENT DECISION

|  |
| --- |
|  |
| **Assessors Comments:** |
| Signature of Assessor: |
| Date: |

1. EVIDENCE OF FEEDBACK

|  |  |  |
| --- | --- | --- |
| **Module No : 3**  **Level : 5**  **Assessor :**……………………………………………………………………………  **Candidate :**…………………………………………………………………………..  **Date of final assessment:**……………………………………………………………. | | |
| **Evidence criteria** | **Achieved** | **Not** |
| 1. Constructive |  |  |
| 2. Timeous (according to Plan) |  |  |
| 3. Correct mode / medium |  |  |
| 4. Participative |  |  |
| 5. Developmental |  |  |
| 6. Accurate |  |  |
| 7. Specific |  |  |
| 8. Documented |  |  |
| 9. Directed to correct parties |  |  |
| **Signing off date:** …………………………………………….  ..........……………. ………………………………….  **Assessor Candidate** | | |

1. OVERALL RESULTS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **OVERALL RESULT** | **Competent** | |  | |
| **Not Yet Competent** | |  | |
| Declaration by Candidate | | | | |
| I, …………………………………………………………………….declare that I am satisfied that the feedback given to me by the Assessor was relevant, sufficient and done in a constructive manner. I accept the assessment decisions and do realise that have no further questions relating to this particular assessment process. I do realise that after this assessment decision, the moderator will either uphold or reverse this assessment decision taken by the assessor. | | | | |
| **Candidate : \_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | **Assessor : \_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | **Moderator : \_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** |

1. ASSESSMENT REVIEW

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Assessor’s Name** | |  | | | | | | | **ID Number** | | | | |  | | |
| **Contact Details of Assessor** | | **Email** | |  | | | | | | | | | | | | |
| **Phone** | |  | | | | | | | | | | | | |
| **Fax** | |  | | | | | | | | | | | | |
| **PART 1** | | | | | | | | | | | | | | | | |
|  | **Review Criteria** | | **Valid** | | **Authentic** | **Current** | | **Consistent** | | | **Reliable** | | **Sufficient** | | | **Comments** |
| ***Please conduct an honest review of the Assessment Instruments used in this assessment:*** | | | | | | | | | | | | | | | | |
| 1 | Evidence Topic 1 | |  | |  |  | |  | | |  | |  | | |  |
|  | Knowledge Assignment | |  | |  |  | |  | | |  | |  | | |  |
| Practical Assignment | |
| Natural Occurring Evidence | |
| Reflection | |
| 2 | Evidence Topic 2 | |  | |  |  | |  | | |  | |  | | |  |
|  | Knowledge Assignment | |  | |  |  | |  | | |  | |  | | |  |
| Practical Assignment | |
| Natural Occurring Evidence | |
| Reflection | |
| 3 | Evidence Topic 3 | |  | |  |  | |  | | |  | |  | | |  |
|  | Knowledge Assignment | |  | |  |  | |  | | |  | |  | | |  |
| Practical Assignment | |
| Natural Occurring Evidence | |
| Reflection | |
| 4 | Evidence Topic 4 | |  | |  |  | |  | | |  | |  | | |  |
|  | Knowledge Assignment | |  | |  |  | |  | | |  | |  | | |  |
|  | Practical Assignment | |
|  | Natural Occurring Evidence | |
|  | Reflection | |
| **PART 2** | | | | | | | | | | | | | | | | |
| **No** | **Review Criteria** | | | | | | | | | **Yes** | | **No** | | | **Remarks** | |
| 1 | Do you feel the candidate was appropriately selected and prepared for the RPL assessment? | | | | | | | | |  | |  | | |  | |
| 2 | Did the candidate interpret the evidence requirements appropriately? | | | | | | | | |  | |  | | |  | |
| 3 | Was the assessment free of potential assessment barriers such as language, literacy, access to resources? | | | | | | | | |  | |  | | |  | |
| 4 | Was the assessment evidence presented by the candidate valid, authentic, current and sufficient? | | | | | | | | |  | |  | | |  | |
| 5 | Was the candidate’s workplace access to evidence sufficiently supportive of the assessment strategy? | | | | | | | | |  | |  | | |  | |
| 6 | Do you feel you could make a fair, valid and reliable assessment decision? | | | | | | | | |  | |  | | |  | |
| **Recommendations** | | | | | | | | | | | | | | | | |
| ***(Feedback on Validity, authenticity, currency and sufficiency of candidate evidence.)*** | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
|  | | | | | | |  | | | | | | | | | |
| **Assessor Signature** | | | | | | | **Date Review Completed** | | | | | | | | | |

1. FINAL DECISION

|  |
| --- |
| **I………………………………………………………. hereby declare Ms/Mr**  **………………………………………… Competent Not Yet Competent** |
| **FEEDBACK TO LEARNER:**  **……………………..………………………..………………………..……………………**  **……………………..………………………..………………………..………………………**  **……………………..………………………..………………………..………………………**  **……………………..………………………..………………………..………………………**  **SIGN: …………………………………… DATE: ……………………..........................** |
| **LEARNER FEEDBACK:**  **……………………..………………………..………………………..………………………**  **……………………..………………………..………………………..………………………**  **……………………..………………………..………………………..………………………**  **……………………..………………………..………………………..………………………**  **SIGN: ……………………………………… DATE: …………………….......................** |
| **MODERATOR FEEDBACK:**  **………………………..………………………..………………………..……………………**  **………………………..………………………..………………………..……………………**  **……………………..………………………..………………………..………………………**  **……………………..………………………..………………………..………………………**  **SIGN: …………………………………… DATE: ……………………........................** |

1. LEARNER FEEDBACK FORM

|  |  |  |  |
| --- | --- | --- | --- |
| **CRITERIA** | **EVIDENCE** | **CRITERIA** | **EVIDENCE** |
| How did your assessor encourage you and put you at ease during the assessment process? |  | Were you given clear and constructive feedback? |  |
| Were your assessor’s questions clear and pitched at the right level of language usage? |  | Did your assessor assess all the evidence provided by you? |  |
| Do you believe that all the assessment criteria and knowledge requirements of the standard you were being measured against were considered in your assessment? |  | Were you aware of any discrimination practice carried out by your assessor towards you? |  |

**LEARNER SIGNATURE:………………………………………………**

**DATE:.…………………………..**

1. SUMMATIVE ASSESSMENT INSTRUCTIONS

**Instructions**

* Work individually and answer all questions.
* Use a black pen and ensure that you complete the questions in your own handwriting.
* Time to spend on this assessment is **1.5 hours.**
* The marks you will attain for each question are shown in brackets.

1. WRITTEN ASSESSMENT

**Candidate instruction:** Complete the following multiple-choice questionnaire by marking the most appropriate response with an x in the space provided.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Scope of Assessment** | | | **Exit Level Outcome/s** | | **Module/s** |
|  | | | 1. :**Factory Control Calculations** | | **3** |
| **Alignment – Learning Outcome 1,2,3&4: Factory concepts, Material balance, Stock taking and Calculations**  **Award four marks for selection of valid “x”. One mark = Competent** | | | | | |
|  | **3.1. What is the formula to calculate tons brix bagasse?** | | | **Mark Allocation** | |
| **a.** | 🞎 | × Tons bagasse | |  | |
| **b.** | 🞎 | × Tons bagasse | |  | |
| **c.** | 🞎 | × Tons bagasse | |  | |
| **d.** | 🞎 | × Tons mixed juice | |  | |
| **e.** | 🞎 | × Tons bagasse | | 4 | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **3.2** | **What is the formula to calculate suspended solids in mixed juice?** | | **Mark Allocation** | |
| **a.** | 🞎 | × Tons mixed juice |  |
| **b.** | 🞎 | × Tons mixed juice |  |
| **c.** | 🞎 | – [ × Tons mixed juice × ] |  |
| **d.** | 🞎 | × Tons bagasse |  |
| **e.** | 🞎 | × Tons mixed juice | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.3** | **What is the corrected extraction used for?** | | **Mark Allocation** |
| **a.** | 🞎 | To correct the influence of pol and fibre on extraction |  |
| **b.** | 🞎 | To calculate the amount of bagasse produced |  |
| **c.** | 🞎 | To determine the brix, pol and fibre of cane from the analysis of mixed juice and final bagasse. |  |
| **d.** | 🞎 | To calculate the mill balance |  |
| **e.** | 🞎 | To monitor the performance of the extraction plant (front-end). | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.4** | **Why is there a need for factory data?** | | **Mark Allocation** |
| **a.** | 🞎 | To calculate tonnage |  |
| **b.** | 🞎 | For proper factory control |  |
| **c.** | 🞎 | For cane payments |  |
| **d.** | 🞎 | To get total of crushed cane |  |
| **e.** | 🞎 | To able comparisons with other mills | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.5** | **Quantitative measurements of the products are required for?** | | **Mark Allocation** |
| **a.** | 🞎 | To determine tons uncorrected. pol in mixed juice |  |
| **b.** | 🞎 | To monitor the performance of the extraction plant (front-end). |  |
| **c.** | 🞎 | The purpose of factory control and cane payments |  |
| **d.** | 🞎 | To determine the fibre that enters the extraction plant |  |
| **e.** | 🞎 | Calculating the imbibition % fibre | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.6** | **Where are the individual vessels calibrated?** | | **Mark Allocation** |
| **a.** | 🞎 | In evaporators |  |
| **b.** | 🞎 | In cubic metres and tables |  |
| **c.** | 🞎 | In heaters |  |
| **d.** | 🞎 | In piping |  |
| **e.** | 🞎 | Tanks | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.7** | **What causes errors?** | | **Mark Allocation** |
| **a.** | 🞎 | Mud |  |
| **b.** | 🞎 | Clear juice |  |
| **c.** | 🞎 | Molasses |  |
| **d.** | 🞎 | A Gas in massecuite in the mass per m3 |  |
| **e.** | 🞎 | Syrup | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.8** | **If the Brix of mixed juice is 15.85% and the sucrose is 12.33 % what would the purity of mixed juice be?** | | **Mark Allocation** |
| **a.** | 🞎 | 75.25 |  |
| **b.** | 🞎 | 77.97 |  |
| **c.** | 🞎 | 76.89 |  |
| **d.** | 🞎 | 77.79 |  |
| **e.** | 🞎 | 77.00 | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.9** | **The correct definition of Pol is:** | | **Mark Allocation** |
| **a.** | 🞎 | Rotation of light. |  |
| **b.** | 🞎 | Apparent sucrose. |  |
| **c.** | 🞎 | Saccharimeter reading. |  |
| **d.** | 🞎 | Percent dissolved solids in a factory stream |  |
| **e.** | 🞎 | Polarised light. | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.10** | **What is the formula to calculate Fibre % bagasse?** | | **Mark Allocation** |
| **a.** | 🞎 | 100 |  |
| **b.** | 🞎 | 100 – moisture bagasse – brix % bagasse |  |
| **c.** | 🞎 |  |  |
| **d.** | 🞎 | × 100 |  |
| **e.** | 🞎 | 100 | 4 |

**TRUE OR FALSE QUESTIONS**

**Award one mark for selection of valid “T/F”. One mark = Competent**

|  |  |  |  |
| --- | --- | --- | --- |
| **3.11** | **A bagasse consists of the following components** | | **Mark Allocation** |
| **a.** | 🞎 | fibre (insoluble substances – including sand) |  |
| **b.** | 🞎 | Brix factor |  |
| **c.** | 🞎 | moisture (water) |  |
| **d.** | 🞎 | Pol Factor |  |
| **e.** | 🞎 | brix (dissolved substances) | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.12** | **The following formula are used to calculate tonnages** | | **Mark Allocation** |
| **a.** | 🞎 | × Tons bagasse |  |
| **b.** | 🞎 | Tons cane + Tons water = Tons bagasse + tons mixed |  |
| **c.** | 🞎 | Fibre % bagasse = 100 – moisture bagasse – brix % bagasse |  |
| **d.** | 🞎 | tons bagasse + tons mixed juice – Tons cane |  |
| **e.** | 🞎 | × Tons bagasse | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.13** | **The following are percentage formulas** | | **Mark Allocation** |
| **a.** | 🞎 | 100 |  |
| **b.** | 🞎 | [ × Tons insoluble solids] |  |
| **c.** | 🞎 | 100 |  |
| **d.** | 🞎 | 100 |  |
| **e.** | 🞎 | [ × Tons mixed juice × ] | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.14** | **True or False the following parameters need to be recorded for factory performance calculations** | | **Mark Allocation** |
| **a.** | 🞎 | pol % sugar |  |
| **b.** | 🞎 | moisture % sugar |  |
| **c.** | 🞎 | purity sugar |  |
| **d.** | 🞎 | pol % final molasses |  |
| **e.** | 🞎 | brix % final molasses | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.15** | **True or False reports and material balances are prepared** | | **Mark Allocation** |
| **a.** | 🞎 | Weekly |  |
| **b.** | 🞎 | Daily |  |
| **c.** | 🞎 | Monthly |  |
| **d.** | 🞎 | Quarterly |  |
| **e.** | 🞎 | Seasonally | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.16** | **True or False the stock in process is worked out by** | | **Mark Allocation** |
| **a.** | 🞎 | The total volume of product is the sum of each individual vessel containing that product. |  |
| **b.** | 🞎 | The product of tons brix per m3 and the volume of the product give the tons brix of the product. |  |
| **c.** | 🞎 | 100 |  |
| **d.** | 🞎 | The product of the ton brix and the purity divided by 100 will give the tons pol of the product. |  |
| **e.** | 🞎 | 100 | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.17** | **True or False the purpose of the sugar factory mill is to?** | | **Mark Allocation** |
| **a.** | 🞎 | To count bagasse purity |  |
| **b.** | 🞎 | To control the process |  |
| **c.** | 🞎 | To detect and indicate the extent of the losses |  |
| **d.** | 🞎 | To supply management with information for financial and administrative purposes |  |
| **e.** | 🞎 | To enable comparisons with other mills | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.18** | **True or False: The Brix of factory products is obtained by:** | | **Mark Allocation** |
| **a.** | 🞎 | Mixed juice can be filtered and read directly. |  |
| **b.** | 🞎 | Syrup and Remelt require a dilution of 1:5 before being read. |  |
| **c.** | 🞎 | Massecuites and molasses require a 1:4 dilution before being read. |  |
| **d.** | 🞎 | Syrup and Remelt require a dilution of 1:4 before being read. |  |
| **e.** | 🞎 | Massecuites and molasses require a 1:5 dilution before being read. | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.19** | **True or False, the following stages are involved in factory control** | | **Mark Allocation** |
| **a.** | 🞎 | Analysis of the product |  |
| **b.** | 🞎 | Daily averaging of analytical results |  |
| **c.** | 🞎 | Daily report using the daily average figures and tonnages |  |
| **d.** | 🞎 | Weekly report using the week’s daily figures, stock in process and the previous week’s figures. To date figures are calculated at the same time. |  |
| **e.** | 🞎 | Monthly figures using the previous month’s to date figures and the current month’s to date figures. | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.20** | **True or False: Daily averaging is calculated by** | | **Mark Allocation** |
| **a.** | 🞎 | Daily averaging of analytical results |  |
| **b.** | 🞎 | pol % final molasses |  |
| **c.** | 🞎 | The analytical results divided by the number of analyses. |  |
| **d.** | 🞎 | Direct analysis of individual cane consignments for brix, pol and fibre. |  |
| **e.** | 🞎 | The quantity of material associated with the analysis. | 5 |

1. FINAL MARKS

**TOTAL MARKS: 90**

**PASS MARK: 72**

|  |  |
| --- | --- |
| **LEARNER MARKS** |  |
| **PERCENTAGE** |  |
| **ASSESSOR SIGNATURE:** | |