



Barista Skills

Professional

Practical Examination

Student Version

Name: _____

Exam Date: _____

Course Trainer: _____

Email Address: _____

Learner Number: _____

PLEASE NOTE:
NOTES

Please answer all questions. The passing score is 80%.
This is a closed-book exam. No conferring is allowed.
The maximum allowable time for this examination is 80 minutes.
If the exam is given in a language that is not your first language, an extra 15 minutes is available upon request of the examiner.

Total points earned: ____ / maximum 120 points

Points needed to pass = 96 (80%)

Pass ☐ Points needed to pass = 96 (80%)

Fail ☐

1. Brew Recipe Design: Calibrate to hit extraction target (20 minutes maximum)

Design and dial in an espresso brew recipe, using the coffee provided by the examiner, that achieves an 18-22% extraction.

You will be supplied with a standard double shot basket and portafilter, as well as the appropriate equipment, refractometer etc., required to measure the extraction percentage at any time you like throughout the exercise, within the time period.

You have 10 minutes to complete the task. If you go over the allotted time by up to 5 minutes, you will lose 2 points. If you go over the allotted time up to 10, you will lose a further 2 points (4 points in total). If you fail to devise and dial in a brew recipe for this coffee that achieves a yield within a range of 18-22% extraction, within this maximum time, you will score 0 points out of 10 in this section.

When you have a recipe that meets **the required extraction target**, indicate that you are ready to your examiner and your time taken will be recorded. The examiner will ask you to confirm the brew recipe and show your measurements to confirm that the task has been completed accurately.

The remainder of this section is not included within the timed element.

Your examiner will ask you to taste your espresso.

You will explain to your examiner your sensory assessment of the brew, using appropriate descriptions for its aroma, flavor and body, with reference to the SCA Flavor Wheel where relevant.

Any area shaded lightly is for the candidate to record their predictions/results.

| 1. Brew Recipe Design Part 1 | | | | |
|--|---------------------|---|---|--------------------|
| Coffee Given: | | | | |
| Time Taken: | | 10 points scored if achieved within the 10 minutes. Time penalty points apply over 15 minutes (if applicable). The task must be completed within 20 minutes to pass the overall practical exam. | | |
| Final Brew Recipe: | Grams in: | Grams out: | Shot Time: | Water temperature: |
| | TDS: | EXT %: | EBF: | Ratio: |
| Task achieved within the time | | | 10pts (minus penalty points if applicable) | |
| Procedure for extraction % measurement correct | | | 2pts | |
| Aroma description correct | Record Description: | | | 2pts |
| Flavor description correct | Record Description: | | | 2pts |
| Body description correct | Record Description: | | | 2pts |
| Subtotal | | | | /18pts |

2. Brew Recipe Design: Calibrate to optimize coffee flavor (30 minutes in total)

Your examiner will now give you an alternative coffee to work with. Your aim is to devise a brew recipe to optimize the flavor of this coffee as you see appropriate.

- You should first make a prediction of the brew recipe you would like to start with. You should record why you have chosen each calibration **in relation to the specific coffee you have been given and the equipment that you will be using. You have 5 minutes to complete this.**
- You then have 25 minutes to complete the rest of the task.
 - You must calibrate to the predicted recipe, achieving the recipe within the tolerance given.
 - You should assess flavor balance and record the TDS and extraction percentage.
 - You are then required to make a final prediction to fine tune your brew recipe in order to optimize the flavor of the given coffee, (informed by the results you have just achieved). For each element of the brew recipe you change, you will need to **predict**, what effect a change in this specific element (not the overall recipe) will have on the extraction percentage of the coffee and the overall body of the espresso.
 - On the final attempt you should record descriptions of the coffee's aroma, flavor and body, with reference to the SCA Flavor Wheel, as well as recording the TDS and extraction percentage.

Please note, although 18 – 22% extraction is widely seen as a target of a “balanced espresso”, you may choose to aim for a different point if you feel that it best represents the style of espresso you wish to present with this coffee. **You have 25 minutes to complete the**

| Predicted Brew Recipe for Given Coffee: | | | |
|--|------------------|--|------|
| Details of coffee given (variety, origin, processing method, roast level): | | | |
| | Recorded choice: | Reason for choice of brew recipe parameter for the specific coffee given: | Pts |
| a. Grams in chosen (+/- 0.5g): | | | 2pts |
| b. Grams out chosen (+/- 2g): | | | 2pts |
| c. Shot time chosen (+/- 2 sec): | | | 2pts |
| d. Please feel free to note any further alterations you may wish to make and their effect e.g. temperature and pressure (if programmable): | | | |

When you have completed predicting the brew recipe above you must then calibrate it on your equipment (within the tolerance indicated):

| Candidate's assessment of actual flavor balance: | | | | | | | | | | | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|----------------------|-------|-------|-------|-------|-------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Acidity Intensity: | | | | | | Sweetness Intensity: | | | | | | Bitterness Intensity: | | | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Actual TDS: | | | | | | Actual Extraction %: | | | | | | | | | | | | | | |

You should make a final prediction on the brew recipe in order to fine tune your first assessment. Changes should be made to two or more of the brew recipe parameters:

| Final Recommended Changes to Brew Recipe | | | | |
|--|------------------|--|--|------|
| | Recorded choice: | Expected change from this calibration on extraction %: | Expected change from this calibration on body: | Pts |
| e. Grams in chosen (+/- 0.5g): | | - No change + ----- | - No change + ----- | 2pts |
| f. Grams out chosen (+/- 2g): | | - No change + ----- | - No change + ----- | 2pts |
| g. Shot time chosen (+/- 2 sec): | | - No change + ----- | - No change + ----- | 2pts |
| h. Please feel free to note any further alterations you may wish to make and their effect e.g. temperature and pressure (if programmable): | | - No change + ----- | - No change + ----- | |
| i. What do you predict the overall brew recipe will do to change extraction % and TDS | | Extraction %: - No change + ----- | TDS: - No change + ----- | |

Only when this brew recipe has been completed, then you should make the following assessment:

| Candidate's assessment of actual flavor balance: | | |
|---|--|---|
| Acidity Intensity: | Sweetness Intensity: | Bitterness Intensity: |
| 0 1 2 3 4 5 6 ----- ----- ----- ----- ----- ----- | 0 1 2 3 4 5 6 ----- ----- ----- ----- ----- ----- | 0 1 2 3 4 5 6 ----- ----- ----- ----- ----- ----- |
| Actual TDS: | Actual Extraction %: | |
| Was the estimated change in TDS achieved (compare actual with section "i")? | Was the estimated change in extraction % achieved (compare actual with section "i")? | |
| Yes (5pts) / No (0pts) | Yes (5pts) / No (0pts) | |

| | | | |
|--|---------------------|--|--------|
| Task completed within 25 minutes | | | /5pts |
| Procedure for extraction % measurement correct | | | /2pts |
| Aroma description appropriate | Record Description: | | /2pts |
| Flavor description appropriate | Record Description: | | /2pts |
| Body description appropriate | Record Description: | | /2pts |
| Total (parts a and b) | | | /35pts |

3. Sensory Evaluation (8 minutes)

You will be presented with 4 sets of 3 cups in a standard triangulation format. In each set of 3 cups, 2 coffees are identical and 1 is different. Record the number of the different cup and the reason for the difference.

| | SET 1 | | SET 2 | | SET 3 | | SET 4 | | |
|---|-------------|------------------------------------|-------------|------------------------------------|-------------|------------------------------------|-------------|------------------------------------|--------------|
| DIFFERENT CUP | | | | | | | | | |
| Points | /3 | | /3 | | /3 | | /3 | | Subtotal /12 |
| DIFFERENCE (circle one sensory attribute per set) | MORE | SWEET ACIDIC BITTER STALE | MORE | SWEET ACIDIC BITTER STALE | MORE | SWEET ACIDIC BITTER STALE | MORE | SWEET ACIDIC BITTER STALE | |
| Points (both must be correct) | /2 | | /2 | | /2 | | /2 | | Subtotal /8 |

4. Workflow and Latte Art (8 minutes)

You must produce 4 milk-based drinks demonstrating 2 pairs of 2 different free pour patterns, produced to a very good standard (as per guidelines set out in the SCA latte art standards). You may discard drinks but you may not exceed 8 minutes before presentation to the examiner. Only drinks presented within the 8 minutes will be scored.

You must observe correct barista routine as per the steps outlined below.

This is the final task in the examination and so the work station should be left appropriately clean and ready for the next user.

| Latte Art Procedure | | | | |
|---------------------|--|--|-----|----|
| Technique | Requirement | Steps | YES | NO |
| Espresso | Lose 1 point from the total for each step missed at any time | Removes portafilter and purge group | | |
| | | Knockout spent grounds and wipes basket clean and dry | | |
| | | Dose and distribute desired grams of coffee | | |
| | | Tamp consistently, level and ergonomically | | |
| | | Clean loose grounds from portafilter surface | | |
| | | Insert portafilter into the group head and start the pump immediately, as the next procedure | | |
| | | Observe the flow and stop pump appropriately | | |
| | | If no further drinks are being made make sure to remove portafilter, knockout spent grinds, clean filter, and return to the group head | | |
| Milk | Lose 1 point from the total for each step missed at any time | Fills jug with cold milk to the correct level | | |
| | | Purges steam wand just prior to use | | |
| | | Wipes steam wand immediately after with correct cloth | | |
| | | Purges steam wand immediately after wiping | | |
| | Time Taken: | (<8 minutes): | | |
| Points deducted: | | | | |

| Latte Art Score sheet | | | | |
|--|---------|---------|---------|---------|
| Pattern type (e.g. Rosetta, Tulip) | Pair 1: | | Pair 2: | |
| | Drink 1 | Drink 2 | Drink 1 | Drink 2 |
| 4.1 Very good contrast | /1 | /1 | /1 | /1 |
| 4.2 Very good harmony, size and position in cup | /1 | /1 | /1 | /1 |
| 4.3 Very good symmetry of pattern | /1 | /1 | /1 | /1 |
| 4.4 Foam quality at level 1 or 2 (on SCA foam chart) | /1 | /1 | /1 | /1 |
| 4.5 Clearly identifiable pattern | /1 | /1 | /1 | /1 |
| 4.6 Very good consistency between pairs | /1 | /1 | /1 | /1 |
| 4.7 Beverage temperature within 5c/9F of requested | /1 | /1 | /1 | /1 |
| 4.8 Foam depth between 5-15mm on all cups | /1 | /1 | /1 | /1 |
| Subtotal | /32 | | | |

5. Water assessment and maintenance (10 minutes)

You should demonstrate how to test your water and chart it on the SCA Water Chart. You should explain the implications this will have on your coffee's extraction and flavor.

You should also talk through the steps to carry out key maintenance tasks with your examiner.

| | Points: | Score |
|---|---------|-------|
| Correct procedure used to measure and chart position on the SCA water chart | 5 | |
| The effect of this water's chart position, on extraction and espresso flavor, is accurately described | 5 | |
| The procedures for changing grinder burrs is accurately explained | 5 | |

Final Scoring:

| Section: | Points available: | Candidates Score: |
|--|-------------------|-------------------|
| 1. Brew recipe design Part 1 | 18 | |
| 2. Brew recipe design Part 2 (2a and 2b) | 35 | |
| 3. Sensory | 20 | |
| 4: Drinks Order – quality and Latte Art test | 32 | |
| 5: Water assessment and maintenance | 15 | |
| TOTAL SCORE | 120 | |

POINTS REQUIRED TO PASS = 96 (80%)

END OF EXAM