ANSWER GUIDE

PREPARE AND SERVE ESPRESSO COFFEE SITHFAB005



HOSPITALITY GROUP TRAINING



1. Describe the best method of storing the following items to ensure food safety and optimise shelf life.

Coffee beans: green beans indefinitely, valves 6 months

Ground coffee: air tight containers

Milk: Refrigerator 0-4°C

Sugar: Loose - Air tight container, dry stores

2. What are the **three** types of coffee beans commonly used to make espresso coffee? Give a characteristic of each.

Coffee Bean Characteristic		
Arabica	Rich, Aromatic. Grown in South America	
Robusta	Flavour unpleasant. Blended with Arabica	
Liberica	Toughest – Instant coffee blends	

3. How does roasting coffee beans affect the flavour? Complete the table below.

Roast	Flavour	
Light	Light brown bean. Delicate flavour and aroma. Milk can be added	
Medium	This coffee has a stronger flavour, can be taken with or without milk	
Dark	This has a strong bitter taste – also called double roast or continental roast. Best served black.	

- 4. What brand or blend of coffee roast does your venue use?

 Answers will vary
- 5. What type of grind best suits the espresso method of brewing coffee? Fine espresso grind



6. Once the pump is activated it should take 4 seconds for coffee to appear. What are the likely problems if the coffee takes the following times to appear?

	DOSE	TAMP	GRIND
1-4 seconds	Not enough coffee	Not enough pressure on tamp	Too coarse
More than 4 seconds	Too much coffee	Too much pressure on tamp	Too fine

7. What might the following quality indicators tell you about the coffee extraction: Pale Crema

Not enough coffee, not enough pressure applied to tamp, grind too coarse. Water pressure too low

Slow drip of Coffee Over tamped coffee

Wet "cake" in group handle after extraction

Coffee grind too fine, too much pressure applied to tamp

Low Water pressure Insufficient steam, pale crema

- 8. The appropriate pour rate for espresso is 30-35 mls in 27-32 seconds?
- 9. When and how should you adjust the grind.

The grind should be monitored throughout service; the grind should be adjusted carefully by someone who is authorised to do so. Ensure the dosing chamber is empty, make small adjustments and only grind enough for one coffee, check and correct.

10. Why is it is necessary to keep your espresso machine clean? Hygiene and food safety – a dirty machine will harbour bacteria and allow for cross contamination to occur. The machine will last longer if regularly cleaned and maintained. Coffee produced will be of better quality



11. What safety measures do you need to keep in mind when cleaning the coffee machine?

Release steam away from body, face and hands. Use chemicals following manufacturer instructions and SDS. Be careful of hot surfaces, Only clean the machine if you have been trained to do so. Use appropriate cleaning chemicals and cloth for the outside of the machine

- 12. List **three** types of milk which can be used in producing coffee?
 - 1. Soy, Almond, Lactose free
 - 2. Skimmed, Hi Lo
 - 3. Full cream, Cafe milk
- 13. Give **two** reasons why milk should only be heated once.
 - 1. To prevent bacteria from forming
 - 2. So it doesn't burn, and so it holds its foam better
- 14. Why should you use both cold milk and cold jugs for texturing milk?

 They both help in the milk texturing process, as they make the process faster, which is more efficient and also helps to create a more velvety foam.
- 15. Why do you purge the steam wand before and after use?

 To bleed off excess moisture and to ensure there is no milk let in from last use
- 16. Describe the process of texturing milk, including ways you can visually and aurally monitor the temperature and texture.
 - Pour the fresh, cold milk into the jug (try to steam only as much milk as you need at a time, but never fill the jug more than half way).
 - Purge the steam wand for about 3 seconds to bleed off excess moisture
 - Place the tip of the steam wand just below the surface of the milk, opposite the jug's handle, and without it touching the sides
 - Tilt the jug at about a 45° angle and turn on the wand to start heating the milk. This will make the milk go into a whirlpool motion. If there is a screeching sound alter the angle of the jug until the sound disappears
 - As the milk rises (expands) lower the jug so the steam wand sits on the surface of the milk
 - Check the temperature (either with the thermometer or your hand at the bottom of the jug)
 - Immerse the steam wand completely into the milk



- Continue to heat the milk until it reaches 60°C. Listen to the sound of the
 milk texturing, if it sounds unpleasant then alter the position or turn off to
 avoid overheating.
- Clean the steam wand immediately with a damp cloth (colour coded), purge the wand.
- Firmly bang the jug onto a flat surface to remove any large air bubbles.
- Swirl the milk and keep it moving to give it a shiny/glossy appearance
- Pour immediately milk that sits around on the bench for a while will cool and go into the danger zone and will also cause the milk and foam to separate.
- If pouring two coffees or there is a slight pause between pouring, ensure to constantly swirl the milk in the jug to help the fat and water content of the milk stay together.
- 17. Why do you swirl the milk before pouring?

 To give it a shiny/glossy appearance, and encourages the fat and water contents of the milk to stay together.
- 18. What is the term used for the presentation technique Barista's use to enhance the visual affect of their coffee's to the customer.
 Latte art or coffee art
- 19. Why do we use standard recipes in the preparation of all coffees in the workplace?

To ensure the product is consistent for the customer.

Quality is maintained.

Helps to reduce wastage

- 20. What types of defects / maintenance issues would you need to call a technician for? List **four**.
 - 1. Broken Grinder
 - 2. Machine not heating up
 - 3. Steam not working properly
 - 4. Broken parts
- 21. List **four** factors that can affect the quality of coffee.
 - 1. Humidity
 - 2. Consistency of coffee grounds
 - 3. Crema on top of the espresso
 - 4. Quality and rate of espresso flow



22. What adjustments might you need to make to the following to ensure the quality of coffee during service, and why?

Dose: Adjust more or less dependent on how the coffee is extracting – see trouble shooting guide

Tamping technique: Applying more or less pressure dependant on how coffee is extracting – see trouble shooting guide

Water flow: Monitor the water flow and adjust if pouring short or long

Water pressure: Monitor and report should water pressure be too low or too high

- 23. Measuring the dose of coffee going into the group handle is important list **four** ways this can be done.
 - 1. Sight
 - 2. Electronically
 - 3. Manually
 - 4. Mechanically
- 24. List two ways you could reduce environmental impacts with energy and water use when preparing coffee
 - Reduce the amount of water used for cleaning specific equipment and also eliminate unnecessary re-cleaning of equipment.
 - Change cleaning procedures to begin cleaning before using water
 - Check for leaks, report and have them repaired.
 - Ensure regular service every 3 months major service every 6 months- to ensure equipment is operating efficiently.
 - When purchasing equipment, choose energy efficient and eco friendly machines
 - Ensure you have received adequate training and are confident in making coffee, steaming milk and cleaning the equipment to reduce waste of coffee, and milk.



25. Identify the parts of the coffee machine below and describe what each part does and how it is used during service:



1. Control buttons

These buttons are programmed to express the correct amount of water for your espresso coffee beverages. Some machines have many buttons, but usually only 2 are used regularly, for small (regular cups) or large (take away). There is usually a free pour button also.

2. Steam control knob

To turn the steam wands off and on

3. Pressure Gauge

Used to monitor the water pressure of the machine

4. Group handle

This is filled with the freshly ground coffee, dosed and tamped correctly. The group handle can either have one spout (for a single shot) or two (for a double) these are then locked into the group head.

5. Hot water spout

This is where you dispense hot water from for long blacks

6. Steam wands

Used for texturing the milk



7. Cup warming tray

To store cups and glasses on to keep warm for service

8. Group head

This is where you place the group handle, and pressurised water is expressed over the grounds of coffee.

- 26. List 8 mise en place requirements for setting up the coffee machine and grinder prior to service.
 - 1. Turn on the machine and grinder
 - 2. Restock cups onto warming level
 - 3. Restock sugars and accompaniments
 - 4. Complete test extractions and make any necessary adjustments
 - 5. Fill hopper with enough beans for service
 - 6. Prepare a damp and dry cloth for the steam wand and grinder
 - 7. Stock up milk varieties
 - 8. Set up group handles with filters
- 27. Describe the process to make a flat white coffee considering the following attributes:

Grind - ensure beans are in the hopper. Grind coffee freshly for each coffee (deteriorates after 20 mins)

Dose - if dosing chamber is full, then grinder should be set to release 7g per 'click'- equal to one dose. Click twice for a double basket. Level and wipe away any stray particles

Tamp - apply even pressure to the tamper to ensure its level. Use hand held tamper or one attached to the grinder

Extract - runoff water through group head to heat it. Select a cup and place under the group head. Place group handle in the group head and immediately select the single pour button, or manual button and extract approx 30ml of espresso. Check extraction for colour, speed and texture

Texture Milk - select enough fresh cold milk for one cup. Purge the steam wand Position jug under steam wand so that the tip is just under the surface of the milk and at a 45 degree angle. Turn steam knob on fully. Ensure jug is positioned so that milk swirls in a circular motion around the jug. Slide tip of steam arm further down in the milk to decrease the amount of 'froth' produced (as this milk is for a flat white). Stop the steam knob when milk reaches 60 degrees, as it will continue to rise once stopped up to the 65 degree optimum temperature. Clean the steam wand with damp cloth. Firmly bang the milk jug on a flat hard surface to pop any air bubbles. Roll the milk- swirl the milk around the jug with a constant wrist action to incorporate both the runny and frothy parts of the milk and to make it very glossy in appearance. Pour into cup immediately. Try to draw the crema to the top so that latte art can be achieved, and ensure that only a small amount of froth is sitting on the top



Presentation - ensure no drips on the outside of the cup. Place on a saucer with a teaspoon and sugar. Perform latte art if experienced

- 28. List 3 ways that you can minimise waste during espresso coffee production.
 - 1. Only heat enough milk for the coffee order
 - 2. Grind as you go
 - 3. Use single or double group handle depending on number of coffees in order to avoid waste shots
- 29. If you recognise that there is a fault with the espresso coffee machine who would you report it to and how?

Manager/Supervisor/Technician

Verbally/ Tag it out/ Telephone/ Maintenance request form

- 30. Which chemical do you use in your workplace for cleaning the coffee machine?

 Answers will vary
- 31. Detail the steps for cleaning the espresso coffee machine and grinder Coffee machine

Remove and clean filter baskets from the group handles

Fit group handle with the blank or blind basket

Using a brush, scrub the group head to release any build up of coffee particles

Place chemicals into the blind basket and fit into group head

Run water into the group handle for 30 seconds

Leave for 2 minutes for the chemicals to activate in the machine

Repeat the above 2 steps 4-5 times, until the water runs clear into the blind basket

Remove drip tray and clean

Wipe down sides of the machine

Clean all jugs, utensils and measuring equipment

Grinder

Remove beans from the hopper

On a daily basis, wipe out the hopper with a try paper towel to remove oil build up. Periodically, clean out hopper with hot soapy water to remove oil build up, but ensure hopper is completely dry before next use.

Empty dosing chamber and wipe out with dry paper towel

Using a brush or dry cloth sweep up and remove any stray coffee grind on or around the grinder



Activity - Part 1

Describe the following espresso based coffees, as they would be prepared to serve to customers:

Coffee	Description/ Characteristics	Presentation/Service ware	Strength e.g. Single or double	Suggested accompaniments
Espresso (short black)	A 30ml shot of coffee, with a layer of golden crema on the surface	Demi tasse cup with spoon on side	Single	Sugar
Long Black	 A long black coffee is the largest black coffee on the menu and is made as follows: Place 120 mls of hot filtered water into a cappuccino cup Extract 60mls of espresso onto the water. Serve immediately It is important that the hot, filtered water is poured first so that the clean water carries the flavours of the espresso and the crema is not broken. 	The long black is served in a cup with a spoon on the saucer.	Double	Cold/hot milk on the side Sugar/sweetener
Flat white	 Australia's standard flat white is served with 1/2cm foam to create a good body and texture. A good flat white is made as follows: a measure of espresso coffee Pour creamy, textured milk into the cup and fill to the top to leave 1/2cm of foam. Draw crema to the surface of the coffee. 	The flat white is served in a standard cup with a teaspoon on the saucer.	Single	Sugar Biscotti



Coffee	Description	Presentation/Service ware	Strength e.g. Single or double	Suggested accompaniments
Cappuccino	 Cappuccino is made as follows: a measure of espresso coffee into a cappuccino cup pour dense creamy foam and milk onto the espresso. Top up cappuccino with milk to give the dome (capp) effect, and 1cm of foam. a sprinkling of drinking chocolate on the top 	Served in a standard cup with a teaspoon on the saucer.	Single	Sugar/sweetener Biscotti
Café Latte	 Caffé Latté is made as follows: a measure of espresso coffee pour creamy textured milk into the glass leaving 1cm of foam Draw crema to the surface of the coffee 	A Café Latté is served in a glass with a paper serviette and a parfait spoon on the saucer.	Single	Sugar Pastry
Long Macchiato - Traditional	 A long macchiato is made from: Extract 60 mls of espresso coffee into a short latte glass, or macchiato cup Traditionally a tablespoon of cold milk and a dollop of foam is then added. An easier way to do this is to add 3-4 teaspoons of textured milk, ensuring that it is not just the foam from the top. 	The macchiato is served in a glass or macchiato cup with a paper serviette and a spoon on the saucer	Double	Sugar/sweetener Biscotti
Long Macchiato - Topped up (WA style)	A topped up long macchiato is made from: • Extract 60 mls of espresso coffee	The macchiato is served in a glass or macchiato cup	Double	Sugar/sweetener Biscotti



	 into a short latte glass, or macchiato cup Top with heated textured milk all the way to the top, allowing for approx 1cm of foam. It is equivalent to t double shot latte. 	with a paper serviette and a spoon on the saucer		
Short Macchiato - Traditional	This coffee is an espresso with a dash of milk and foam to stain the coffee, thereby creating 3 layers. • a measure of espresso coffee • add a dash of heated milk • top with a teaspoon of foam The heated milk and foam can be added together by using 2 tsps of milk (not just the foam) from your heated jug.	The macchiato is served in a glass (100ml glass) or demitasse cup with a paper serviette	Single	Sugar/sweetener Biscotti
Short Macchiato - Topped up (WA style)	This is a single espresso shot served in a 100ml glass or demitasse cup, and then topped all the way to the top with heated textured milk. There will be approx ½ cm foam.	The macchiato is served in a glass (100ml glass) or demitasse cup with a paper serviette	Single	Sugar/sweetener Biscotti
Ristretto	A Ristretto is traditionally a short shot of Espresso. It still requires the same amount of ground coffee to be put into the group handle as a regular espresso, however only the first 15-20ml is to be extracted, and then you stop the water flow.	Serve in an espresso cup or glass. Ensure to serve promptly to avoid the crema dispersing	Restricted shot or double	



Coffee	Description	Presentation/Service ware	Strength e.g. Single	Suggested accompaniments
Piccolo Latte	A Traditional Piccolo latte is a single Ristretto shot (15-20ml) served in a 100ml glass and then topped up with warm silky milk. It is very similar to the 'topped up' short macchiato, but using a Ristretto shot. It is sometimes also referred to in Australia as a 'low-tide latte'	Served in a glass (100ml glass) or demitasse cup with a paper serviette	Restricted shot	Sugar/sweetener Biscotti



Activity - Part 2

- 1. A customer orders the following coffees. Describe and sequence these drinks into the correct order in which you would make them.
 - 1x Flat white
 - 2x Cappuccino
 - 2x Long black
 - 1x Skinny flat white

Extract 4 shots of coffee using 2 double group handles

Texture milk for the first 3 coffees (1x Flat white, 2x cappuccino)

Use the milk to pour the cappuccinos first using majority of the froth

Lastly pour the flat white from that jug of milk

Texture skimmed milk for the remaining flat white

Pour 2/3 of a cup of hot water into 2 cups

Extract a double shot of espresso over each cup of hot water and serve immediately.

- 2. A customer places the following order. Complete the order pad with the order, using shorthand abbreviations that you currently use in your workplace.
 - 2x Flat white
 - 1x Soy latte
 - 1x Hot chocolate with marshmallows
 - 2x Long black with cold milk on side
 - 1x Skinny flat white
 - 1x Half strength mocha

Eg: 2x FW 1x L (Y) 1x HC © 2x LB cmos 1x Sk FW 1x ½ M





- 3. Which coffee would you recommend for the following customers;
 - a. Someone who is lactose intolerant Coffee made with Soy or almond milk or a long black
 - b. Someone looking for a stronger coffee Long Macchiato
 - c. Someone looking for a weaker coffee Latte, ½ strength latte or regular coffee with the espresso element served on the side
 - d. Someone looking for a cold coffee lced coffee or iced mocha
 - e. Someone looking for a large coffee Mug of flat white, cappuccino or a large take away size