

COFFEE KNOWLEDGE TEST

Agronomy – Coffee Plantation Knowledge – Green Bean Knowledge

1. In which country was coffee first discovered?
2. In which climate zones of the world can coffee grow?
3. What is the maximum elevation where coffee can grow?
4. Name at least four varieties of Arabica Coffee
5. What are the three most popular planted varieties in your country?

What is the benefit of use for each of the planted varieties?

Variety	Benefit

6. What is Catuai coffee?
7. What is Catimor coffee?
8. What are the advantages to plant Catimor and what are the disadvantages?

Advantages	Disadvantages

9. How can you recognize an Arabica Typica bean?
10. How do you (visually) recognize green coffee beans from a high elevation?
11. What is the ideal moisture content for green coffee beans before export?
12. What is the difference between washed coffee and natural coffee?

13. Name three advantages of shade in coffee plantations

Advantage 1:
Advantage 2:
Advantage 3:

14. What is organic coffee?

15. Give a definition of specialty coffee

16. How do you recognize a ripe coffee cherry?

17. Describe the most important processing steps in the wet beneficio (traditional fermentation). Fill in each step in the box)



18. Describe the most important processing steps in the dry mill. .

Fill in each step in the box



19. Describe the best storage conditions for green coffee

Coffee Cupping & Tasting

1. What is acidity?

2. What is body?

3. How do you define flavor?

4. What is the usual weight of a coffee sample?

5. What is the ideal roast color for coffee tasting?

6. What is the required water heating capacity in the cupping room (degrees Celsius)

7. Name the name of a manufacturer of sample roasters
8. Describe the grinding mechanism of a coffee grinder
9. Explain from the following (flavor) defects their probable cause:

Defect Description	Probable Cause
Overfermented	
Baggy	
Phenolic	
Moldy	
Woody	
Dirty	
Moisture content green beans too low	
Pale / white beans	
Floater	
Partially black beans	

Coffee Market

1. What is the current US\$ price level at the New York C-Market?
2. Why are current coffee prices in the world so low?
3. What is the coffee volume (lbs) of one standard contract?
4. Which country is the world's biggest coffee producer?
5. How much coffee (bags 60 kg) is consumed in the world?
6. What defines a specialty coffee grade?
7. What is the current premium or discount (versus the NY-C Market price) for commercial grade coffee from your country?
8. What is the price level (US\$) for Fair Trade coffee?

9. What is European preparation?
10. What is American preparation?
11. What means SHB?
12. What is the difference between SHB and HB?
13. What is a type sample?
14. What is a pre-shipment sample?
15. Name at least three internationally known roasting companies

Case Story

Write a case story. You are the coffee tasting expert of a local dry mill and you need to select the three best coffees that will be offered for export to a specialty coffee company in Seattle, WA, USA. The Dry Mill produces 10 different qualities. Your task is to select the best three samples. Describe the protocol as you would apply it in a coffee laboratory.

Please use the following steps in your process description:

- a) Measurement of three quality parameters
(please three parameters)
- b) Sample Roasting, using a two barrel gas fired drum roaster
- c) Preparation of the cupping table
- d) Cupping and tasting the coffee
- e) The final report which also explains why you have selected these best three samples

Coffee Knowledge Test Answers

1. Yemen or Ethiopia
2. Sub-tropic and Tropic or between of Cancer and of Capricorn
3. To the point where frost can occur
4. Typica, Caturra, Bourbon, Catuai, Catimor, Mundo Novo, Maragogype, Paca, Pacamara
5. What are the three most popular planted varieties in your country? What is the benefit of use for each of the planted varieties?

Variety	Benefit
Typica, Caturra, Bourbon, Maragogype, Pacas, Pacamara	Good cup quality
Catuai, Mundo Novo	Acceptable cup quality and medium-high yield
Catimor	High yield, disease resistant

6. Catuai is a hybrid from the 'Mundo Novo' and 'Caturra' varieties
7. Catimor is a cross between Timor and Caturra
8. What are the advantages to plant Catimor and what are the disadvantages?

Advantages	Disadvantages
disease resistant (especially coffee rust)	
high yield	Poor cup quality

9. Longer and oval shaped beans
10. Tightly knit structure around the center cut and high density of beans
11. 10 to 12%

12. Washed coffee is processed with water and natural coffee is processed dry, without water

13. Name three advantages of shade in coffee plantations

Advantage 1: slower maturation of coffee cherries, leading to possible better cup quality
Advantage 2: shade helps to maintain ideal climate conditions (temperature, moisture) around coffee trees
Advantage 3: helps to retain water in the soil
Advantage 4: helps to maintain biodiversity

14. Candidates should mention that organic coffee is produced without the input of agro-chemicals.

The official correct version is: Organic coffee production is based on minimal use of off-farm inputs and management practices that restore, maintain and enhance ecological harmony. (Excerpted from the definition "organic" that the U.S. National Organic Standards Board adopted in April 1995.)

15. Specialty coffee: The coffee does not contain any flavor defect

The coffee has a minimum of visible defects (refers to SCAA grading standards)

In a cupping and tasting session, the coffee has certain aroma and flavor attributes

16. How do you recognize a ripe coffee cherry?

Red color of cherry (or yellow in case of “Caturra Amarilla”)

17. Describe the most important processing steps in the wet beneficio (traditional fermentation).

Fill in each step in the box

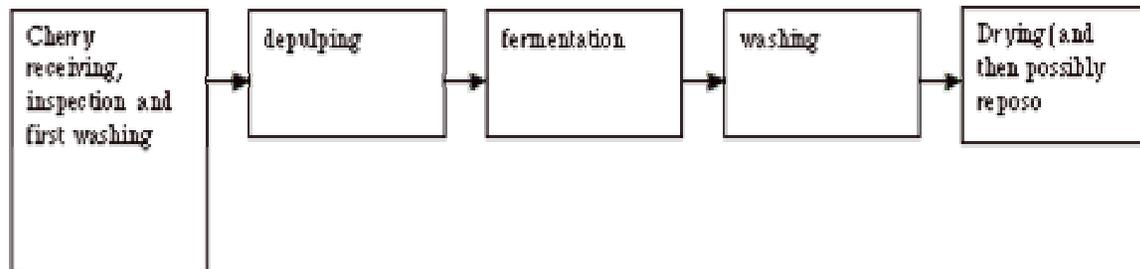
Cherry receiving, inspection and first washing

depulping

fermentation

washing

Drying (and then possibly reposo)



18. Describe the most important processing steps in the dry mill. Fill in each step in the box.

Dehulling (and then possibly polishing)

Density (“Oliver”) grading

Size screening

Electronic sorting or hand sorting

bagging



19. Describe the best storage conditions for green coffee

Cool, relatively dry, with sufficient air venting and circulation

Coffee Cupping & Tasting

1. What is acidity? The brightness in the cup
2. What is body? Mouthfeel, viscosity, sensory ‘weight’
3. How do you define flavor? Aroma + taste (sweet, sour, salt, bitter)

4. What is the usual weight of a coffee sample? At least 300 grs beans
5. What is the ideal roast color for coffee tasting? Roasted before second crack. Or... medium brown color Or.. between Agtron colors 57 and 65 (M-Basic standard).
6. What is the required water heating capacity in the cupping room (degrees Celsius) 100 degrees C.
(if lab is at sea level)
7. Name the name of a manufacturer of sample roasters. Probat, Burns, Quantik, Pinhalense.
8. Describe the grinding mechanism of a coffee grinder. Grinding disks that crush or cut the coffee beans
9. Explain from the following (flavor) defects their probable cause:

Defect Description	Probable Cause
Overfermented	Fermentation too long
Baggy	Poor storage conditions
Phenolic	There are various theories. The best one is: overripe cherries picked up from the ground. Cherry picked up contaminants from soil.
Moldy	Moisture problems; improper drying
Woody	Improper storage conditions

Dirty	Insufficient cleaning of wet mill
Moisture content green beans too low	Storage conditions
Pale / white beans	Improper storage: insufficient air circulation, ambient temperature too high
Floaters	Immature cherries; insect damaged cherries
Partially black beans	Fungi attack or attack by bugs on immature cherry

Coffee Market

1. What is the current US\$ price level at the New York C-Market?
2. Why are current coffee prices in the world so low? Overproduction, oversupply.
3. What is the coffee volume (lbs) of one standard contract? 37,500 lbs
4. Which country is the world's biggest coffee producer? Brazil
5. How much coffee (bags 60 kg) is consumed in the world? Approximately 100 million bags (@60 kgs)
6. What defines a specialty coffee grade? A minimum of visual defects, up to max. 5 defect equivalents
7. What is the current premium or discount (versus the NY-C Market price) for commercial grade coffee your country? I don't know the answers on this; should be checked with the Green Coffee Association.

8. What is the price level (US\$) for Fair Trade coffee? \$ 1.26 per lb for conventional and \$ 1.41 for organic
9. What is European preparation? To be verified
10. What is American preparation? To be verified
11. What means SHB? Strictly Hard Bean
12. What is the difference between SHB and HB? Elevation
13. What is a type sample? A general example of what a producer / broker / exporter can supply of a given coffee
14. What is a pre-shipment sample? A sample sent before shipment of the green coffee