

Advanced Viticulture and Enology

Viticulture & Wine · Practice Test · 20 Questions

1. Which process involves the conversion of malic acid into lactic acid by *Oenococcus oeni* bacteria to reduce wine acidity?

- A) Carbonic maceration
- B) Malolactic fermentation
- C) Chaptalization
- D) Sulfiting

2. What is the primary function of the rootstock in grafted *Vitis vinifera* vines?

- A) To increase sugar accumulation in berries
- B) To enhance vine photosynthetic efficiency
- C) To provide resistance against phylloxera
- D) To regulate canopy density

3. In viticulture, what does the term 'veraison' specifically signify?

- A) The onset of ripening and color change
- B) The dormant winter period
- C) The completion of primary fermentation
- D) The pruning of secondary shoots

4. Which chemical compound is largely responsible for the 'cork taint' defect in bottled wine?

- A) 2,4,6-trichloroanisole (TCA)
- B) Ethyl acetate
- C) Acetaldehyde
- D) Methoxypyrazine

5. What is the primary botanical family to which the grapevine genus *Vitis* belongs?

- A) Rosaceae
- B) Vitaceae
- C) Solanaceae
- D) Ericaceae

6. Which technique involves harvesting grapes that have been frozen while still on the vine to produce concentrated dessert wines?

- A) Botrytization
- B) Late harvest
- C) Cryo-extraction
- D) Eiswein production

7. What is the primary purpose of 'trellising' in a commercial vineyard?

- A) To prevent soil erosion
- B) To manage vine vigor and maximize sun exposure
- C) To increase grape skin thickness
- D) To accelerate the fermentation process

8. Which mineral nutrient deficiency in grapevines commonly manifests as chlorosis of the leaves?

- A) Nitrogen
- B) Potassium
- C) Magnesium
- D) Iron

9. What is the technical term for the study and identification of grape varieties?

- A) Ampelography
- B) Pomology
- C) Enology
- D) Viticulture

10. Which gas is intentionally added during the bottling of some white wines to prevent oxidation and maintain freshness?

- A) Carbon dioxide
- B) Sulfur dioxide
- C) Methane
- D) Helium

11. What is the result of 'chaptalization' in winemaking?

- A) Increased alcohol potential
- B) Decreased bitterness
- C) Higher acidity levels
- D) Increased color extraction

12. Which fungus is known as 'noble rot' when it infects grapes under specific climatic conditions to concentrate sugars?

- A) Botrytis cinerea
- B) Oidium tuckeri
- C) Plasmopara viticola
- D) Uncinula necator

13. Which component of the grape berry provides the majority of the tannins found in red wine?

- A) Pulp
- B) Skin and seeds
- C) Stem
- D) Juice

14. What is the primary impact of high canopy density on grape development?

- A) Increased sugar levels
- B) Decreased fungal disease pressure
- C) Reduced airflow and increased humidity
- D) Accelerated ripening

15. What is the significance of the 'degree days' calculation in viticulture?

- A) Measuring soil pH levels
- B) Estimating heat accumulation for grape ripening
- C) Predicting rainfall patterns
- D) Determining harvest labor requirements

16. Which winemaking method involves fermenting whole, uncrushed grape clusters in a carbon-dioxide-rich environment?

- A) Cold soaking
- B) Carbonic maceration
- C) Batonnage
- D) Racking

17. What defines a 'terroir' in the context of viticulture?

- A) The specific brand of winemaking equipment
- B) The complete natural environment in which a wine is produced
- C) The duration of barrel aging
- D) The specific chemical additives used in the vineyard

18. Which element is the primary substrate for yeast metabolism during alcoholic fermentation?

- A) Citric acid
- B) Hexose sugars
- C) Tartaric acid
- D) Succinic acid

19. In red wine production, what does the 'cap' refer to?

- A) The layer of skins and solids that rises to the top of the fermenter
- B) The wax seal on the bottle
- C) The protective netting used against birds
- D) The final layer of yeast sediment

20. What is the function of the 'bâtonnage' technique in winemaking?

- A) Clarifying the wine using egg whites
- B) Stirring the lees to add texture and flavor
- C) Adjusting the sulfur levels
- D) Filtering the wine before bottling