

PRACTICE EXAM 8: CSS SIMULATION

(100 QUESTIONS)

1. A spirits chemist explains that the boiling point of pure ethanol at standard atmospheric pressure is what?
 - A. 64.7 degrees Celsius
 - B. 100.0 degrees Celsius
 - C. 78.4 degrees Celsius
 - D. 56.2 degrees Celsius

2. A distillery is told that the reflux ratio in a column still refers to what?
 - A. The proportion of vapor that condenses and falls back versus what passes upward to the next plate
 - B. The temperature differential between the bottom and top of the column
 - C. The pressure differential between the still and the condenser
 - D. The ratio of malted barley to unmalted grains in the mash

3. A consumer asks why distillers use copper extensively in their stills despite the higher cost compared to stainless steel. The reason is what?
 - A. Copper conducts heat more efficiently than stainless steel
 - B. Copper is required by EU spirits regulations
 - C. Copper stills last longer than stainless steel stills
 - D. Copper chemically removes sulfur compounds from the spirit, improving flavor

4. A bartender wants to identify which yeast genus is responsible for producing nearly all commercial alcoholic fermentation. The genus is what?

- A. Lactobacillus
- B. Saccharomyces
- C. Brettanomyces
- D. Aspergillus

5. A consumer is told that the term "wash" in distillation refers to what?

- A. The water used to dilute the finished spirit before bottling
- B. The fermented liquid that is sent to the still for distillation
- C. The cleaning solution used between distillation runs
- D. The residue left in the still after distillation

6. A spirits professional is asked which compound is the primary congener responsible for the characteristic banana and pear ester aromas in many spirits. The compound is what?

- A. Isoamyl acetate
- B. Acetaldehyde
- C. Furfural
- D. Methanol

7. A distillery is told that "single distillation" in Armagnac production produces a spirit at what approximate strength off the still?

- A. 95 percent ABV
- B. 80 percent ABV

- C. 70 percent ABV
- D. 52 to 60 percent ABV

8. A vodka producer in Russia is told that traditional Russian vodka must contain what minimum percentage ABV?

- A. 35 percent ABV
- B. 37.5 percent ABV
- C. 40 percent ABV
- D. 42 percent ABV

9. A consumer asks why Tito's Handmade Vodka is unusual among large-volume American vodkas. The reason is what?

- A. It is made from corn in pot stills rather than column stills
- B. It is the only vodka made from organic certified grain
- C. It is the only U.S. vodka exported to over 100 countries
- D. It is filtered through diamond dust before bottling

10. A bartender is told that the Swedish vodka brand Absolut is owned by which French spirits company?

- A. Diageo
- B. LVMH (Moët Hennessy)
- C. Bacardi Limited
- D. Pernod Ricard

11. A consumer is told that vodka in the United States must be bottled at a minimum of 40 percent ABV. Below this strength, the product would be classified as what?

- A. Illegal under U.S. spirits law
- B. Diluted vodka requiring special labeling
- C. Permitted only as flavored vodka
- D. Limited to industrial use only

12. A bartender is asked which gin botanical contributes the warm, slightly citrusy character that complements juniper in nearly every classic recipe. The botanical is what?

- A. Cardamom from India
- B. Cubeb from Java
- C. Coriander seed
- D. Star anise

13. A spirits professional explains that Bombay Sapphire uses ten botanicals in a vapor-infusion process developed by a French perfumer. The vapor-infusion still type is called what?

- A. Carterhead still
- B. Coffey still
- C. Charentais still
- D. Tilted-pot still

14. A consumer asks why London Dry Gin must have all flavor character from botanicals introduced during distillation rather than added afterward. The legal requirement reflects what?

- A. The original 18th-century recipes used only post-distillation flavoring

- B. Modern hygiene standards require pre-distillation botanical contact
- C. EU rules grandfather post-distillation gins as a separate category
- D. The London Dry designation is a strict purity standard prohibiting any post-distillation additions

15. A bartender wants to identify which Plymouth Gin expression is bottled at 41.2 percent ABV and produced exclusively at the Black Friars Distillery. The expression is what?

- A. Plymouth Sloe
- B. Plymouth Navy Strength
- C. Plymouth Original
- D. Plymouth Reserve

16. A consumer is told that Tanqueray No. Ten is distinguished from standard Tanqueray London Dry by which production feature?

- A. The use of organic juniper exclusively
- B. The use of fresh whole citrus fruits during distillation
- C. Aging in former Sherry casks for one year
- D. The use of triple-distilled potato spirit base

17. A bartender is asked which gin brand is produced in Scotland and uses 11 botanicals from the Highlands plus exotic ingredients including Coul Blush apples. The brand is what?

- A. Caorunn
- B. Edinburgh Gin
- C. Hendrick's
- D. Botanist Foraged

18. A spirits professional explains that the Distillers Company Limited was the major Scotch industry conglomerate eventually absorbed into which modern company?

- A. Beam Suntory
- B. Pernod Ricard
- C. Brown-Forman
- D. Diageo

19. A Scotch whisky producer wants to bottle a single malt at the natural color from the cask without any caramel coloring added. The label term that indicates this is what?

- A. Cask strength
- B. Single cask
- C. Natural color
- D. Non-chill filtered

20. A consumer is told that the Scotch term "vatted malt" was officially replaced in 2009 by which new legal term?

- A. Blended malt Scotch whisky
- B. Pure malt Scotch whisky
- C. Combined malt Scotch whisky
- D. Multi-distillery malt

21. A bartender wants to identify which Scotch whisky region's distilleries include Glenkinchie and Auchentoshan, both producing lighter-bodied malts. The region is what?

- A. Speyside

- B. Lowland
- C. Highland
- D. Campbeltown

22. A consumer asks why Bowmore Distillery on Islay is historically significant. The reason is what?

- A. It is the largest Scotch distillery by output volume
- B. It produces only sherry-cask-aged single malts
- C. It is the only Islay distillery owned by an American company
- D. It is the oldest licensed distillery on Islay, dating to 1779

23. A bartender is asked which Scotch distillery is famous for producing whisky with the densest, most heavily peated character on Islay, marketed with the "peatiest of the peaty" tagline. The distillery is what?

- A. Lagavulin
- B. Bowmore
- C. Ardbeg
- D. Bruichladdich

24. A consumer tastes a Highland Scotch with a notably honeyed, slightly heathery character and learns it was distilled at the tallest stills in Scotland. The distillery is what?

- A. Glenmorangie
- B. Dalmore
- C. Glenfarclas
- D. Old Pulteney

25. A bartender is told that the Scotch distillery Tomatin holds which historical distinction?

- A. It produces the world's most expensive single malt
- B. It is the only Highland distillery owned by Diageo
- C. It was once the largest distillery in Scotland by capacity
- D. It uses water from the deepest natural spring in Speyside

26. A consumer is told that the Single Pot Still Irish whiskey style was originally developed as a tax-avoidance strategy in response to a 19th-century British tax on what?

- A. Malted barley
- B. Glass bottles for spirits
- C. Imported European yeast
- D. Copper still capacity

27. A bartender wants to identify the Cooley Distillery's flagship blended Irish whiskey brand. The brand is what?

- A. Bushmills Original
- B. Tullamore D.E.W.
- C. Powers Gold Label
- D. Kilbeggan Traditional

28. A consumer asks why most modern Irish whiskey lacks peat character compared to many Scotches. The reason is what?

- A. Irish law specifically prohibits the use of peated malt
- B. Most Irish distilleries use closed kilns with smokeless heat sources

- C. Irish climate prevents the cultivation of peat bogs
- D. Peat ovens were banned in Ireland in the late 19th century

29. A bartender wants to identify which Irish whiskey is the famous Single Pot Still expression from the Midleton Distillery aged in former Sherry casks. The brand is what?

- A. Powers Three Swallow
- B. Green Spot
- C. Yellow Spot
- D. Redbreast

30. A consumer is told that American Bourbon must be aged in what type of container?

- A. New, charred oak containers
- B. Used oak barrels of any size
- C. Stainless steel tanks for at least one year
- D. Glass demijohns lined with oak chips

31. A bartender wants to identify the maximum proof at which a spirit may enter the barrel and still qualify as Bourbon. The maximum is what?

- A. 100 proof (50 percent ABV)
- B. 110 proof (55 percent ABV)
- C. 125 proof (62.5 percent ABV)
- D. 160 proof (80 percent ABV)

32. A consumer is told that "Straight Bourbon" requires a minimum aging period. That period is what?

- A. One year in oak
- B. Two years in new charred oak
- C. Three years in any oak container
- D. Four years before any state may use the Straight designation

33. A bartender wants to identify which Bourbon was the first commercial single barrel Bourbon when it launched in 1984. The brand is what?

- A. Blanton's from Buffalo Trace
- B. Maker's Mark
- C. Booker's True Barrel
- D. Wild Turkey 101

34. A consumer asks why Tennessee Whiskey is not legally classified as Bourbon despite meeting Bourbon's other requirements. The reason is what?

- A. It is distilled at a higher proof than Bourbon allows
- B. It uses a different type of corn than Bourbon
- C. It is aged in used barrels rather than new oak
- D. It undergoes the Lincoln County Process before barreling, which makes it a separate category

35. A bartender is told that the Bottled-in-Bond Act was originally passed in what year?

- A. 1862
- B. 1880
- C. 1897

D. 1906

36. A consumer is asked which American whiskey style became nearly extinct in the United States during the mid-20th century but has experienced a dramatic revival since the early 2000s. The style is what?

A. Tennessee Whiskey

B. Rye Whiskey

C. Wheat Whiskey

D. Corn Whiskey

37. A bartender wants to identify the Canadian whisky producer that owns the Crown Royal brand. The producer is what?

A. Diageo

B. Beam Suntory

C. Pernod Ricard

D. Sazerac Company

38. A consumer is told that one Canadian whisky brand's Northern Harvest Rye expression was named World Whisky of the Year by Jim Murray's Whisky Bible in 2016. The brand is what?

A. Canadian Club Premium

B. Forty Creek Reserve

C. Crown Royal

D. Wiser's Special Blend

39. A bartender wants to identify which Japanese whisky distillery is owned by Suntory and located in the southern Japanese Alps. The distillery is what?

- A. Yamazaki near Kyoto
- B. Yoichi in Hokkaido
- C. Miyagikyo near Sendai
- D. Hakushu in the Japanese Alps

40. A consumer asks why some Japanese whisky was found to contain large amounts of imported Scotch in the late 2010s. The reason is what?

- A. Japanese distilleries had stopped producing whisky entirely
- B. Japanese whisky labeling rules until 2021 had no requirement that the spirit be made or aged in Japan
- C. Suntory and Nikka had been forced to import by trade agreements
- D. The Japanese government required imported spirit content for tax purposes

41. A bartender is told that the Indian whisky producer Paul John is based in which Indian state?

- A. Karnataka
- B. Maharashtra
- C. Tamil Nadu
- D. Goa

42. A consumer asks how Cognac is legally distinguished from other French brandies. The defining factor is what?

- A. Cognac must be produced from designated grapes in the Cognac region of France
- B. Cognac must be aged for at least 25 years

- C. Cognac must be distilled in column stills
- D. Cognac must be bottled at exactly 40 percent ABV

43. A spirits professional is asked which Cognac house is known for producing exclusively Fine Champagne expressions. The house is what?

- A. Hennessy
- B. Courvoisier
- C. Rémy Martin
- D. Martell

44. A consumer is told that the typical Cognac aging vessel holds approximately what capacity?

- A. 200 liters
- B. 350 liters
- C. 500 liters
- D. 700 liters

45. A bartender wants to identify the typical Cognac age designation that requires a minimum of two years aging. The designation is what?

- A. XO (Extra Old)
- B. Napoleon
- C. VSOP (Very Superior Old Pale)
- D. VS (Very Special)

46. A consumer asks which Armagnac distillation tradition is unique among major French brandy regions. The tradition is what?

- A. Single distillation in a continuous column still called the alambic armagnacais
- B. Triple distillation in copper pot stills exclusively
- C. Vacuum distillation at low temperatures
- D. Quadruple distillation in glass-lined stills

47. A bartender is told that one Spanish brandy region uses traditional grape varieties also used to make a famous Spanish sparkling wine. The region is what?

- A. Brandy de Jerez
- B. Brandy de Galicia
- C. Brandy del Penedès
- D. Brandy de Rioja

48. A consumer tastes a Pisco from Peru that is intensely floral and made from a single aromatic grape variety. The Pisco style is what?

- A. Pisco Acholado
- B. Pisco Aromático
- C. Pisco Mosto Verde
- D. Pisco Puro

49. A bartender wants to identify which Calvados sub-appellation requires double distillation in pot stills. The sub-appellation is what?

- A. Calvados AOC

- B. Calvados Domfrontais AOC
- C. Calvados Centrale AOC
- D. Calvados Pays d'Auge AOC

50. A consumer asks which Italian fruit brandy is made from grape pomace left after wine production. The brandy is what?

- A. Grappa
- B. Mirabelle
- C. Kirschwasser
- D. Slivovitz

51. A bartender is told that the famous Royal Navy daily rum ration officially ended on July 31, 1970. That date is now known as what?

- A. Trafalgar Day
- B. Royal Navy Day
- C. Black Tot Day
- D. Pusser's Memorial Day

52. A spirits professional is asked which Caribbean nation became the world's largest rum producer thanks to one major brand. The nation and brand are what?

- A. Jamaica and Appleton Estate
- B. Puerto Rico and Bacardi
- C. Cuba and Havana Club
- D. Trinidad and Angostura

53. A consumer is told that Brazilian cachaça must be made from what raw material?

- A. Fresh sugarcane juice
- B. Cane molasses from refining
- C. Aged cane vinegar fermented over months
- D. Dried sugarcane husks

54. A bartender wants to identify which Caribbean rum tradition produces high-ester, funky pot still rums using long fermentations and dunder. The tradition is associated with which nation?

- A. Puerto Rico
- B. Cuba
- C. Barbados
- D. Jamaica

55. A consumer asks why Demerara rum from Guyana has such intense, full-bodied character. The reason is what?

- A. The use of imported French oak for aging
- B. The use of historic stills including a wooden Coffey still found nowhere else in the world
- C. The fermentation with imported European yeasts
- D. The use of small barrels for accelerated aging

56. A bartender is told that one Caribbean nation's distillery dates to 1703 and is often called the home of the world's oldest rum brand. The nation is what?

- A. Jamaica
- B. Trinidad

- C. Barbados
- D. Cuba

57. A consumer asks what carbohydrate the agave plant stores that requires cooking before fermentation. The carbohydrate is what?

- A. Inulin
- B. Sucrose
- C. Cellulose
- D. Glucose

58. A bartender wants to identify the only agave species legally permitted for tequila production. The species is what?

- A. Agave salmiana variedad jalisco
- B. Agave americana variedad mexicana
- C. Agave angustifolia variedad oaxaca
- D. Agave tequilana Weber, variedad azul

59. A consumer is told that 100 percent Agave Tequila is distinguished from Mixto Tequila by which characteristic?

- A. It must be aged for at least three years
- B. It contains only sugars derived from blue Weber agave with no other added sugars
- C. It must be produced in pot stills exclusively
- D. It must be bottled at a higher proof than Mixto

60. A bartender wants to identify the tequila category aged from one to three years in oak barrels not exceeding 600 liters. The category is what?

- A. Tequila Reposado
- B. Tequila Blanco
- C. Tequila Añejo
- D. Tequila Cristalino

61. A consumer is told that the most traditional, labor-intensive tequila production uses a stone wheel pulled by mule or tractor to crush cooked agave. That stone wheel is called what?

- A. A horno
- B. A diffuser
- C. A tahona
- D. An autoclave

62. A spirits professional is asked which agave species accounts for approximately 90 percent of all mezcal production. The species is what?

- A. Espadín (*Agave angustifolia*)
- B. Tobalá (*Agave potatorum*)
- C. Tepeztate (*Agave marmorata*)
- D. Madrecuixe (*Agave karwinskii*)

63. A bartender is told that the smoky character of traditional mezcal results from cooking the agave piñas in what?

- A. Stainless steel autoclaves under pressure

- B. Modern brick ovens with gas heat
- C. Industrial diffusers using hot water
- D. Earthen pit ovens over wood fires

64. A consumer asks which Mexican spirit is technically not made from agave but from the desert spoon plant *Dasyliirion*. The spirit is what?

- A. Bacanora from Sonora
- B. Sotol from Chihuahua and neighboring states
- C. Raicilla from Jalisco
- D. Mezcal from Oaxaca

65. A bartender wants to identify the traditional Mexican fermented agave beverage that predates Spanish conquest and is the historical ancestor of distilled agave spirits. The beverage is what?

- A. Pulque
- B. Tepache
- C. Aguamiel
- D. Mezcal Ancestral

66. A consumer is told that the Carthusian monks have been producing Chartreuse from a recipe of how many herbs and plants?

- A. 27 herbs and plants
- B. 47 herbs and plants
- C. 130 herbs and plants
- D. 56 herbs and plants

67. A bartender wants to identify the Italian aperitivo created in 1860 by Gaspare Campari and originally colored with cochineal-derived carmine. The product is what?

- A. Aperol
- B. Cynar
- C. Punt e Mes
- D. Campari

68. A consumer asks which Italian amaro is uniquely flavored with artichoke as its primary botanical. The amaro is what?

- A. Averna from Sicily
- B. Cynar from Padua
- C. Fernet-Branca from Milan
- D. Ramazzotti from Milan

69. A bartender is told that one Italian liqueur is bright yellow from saffron and made in Benevento from 70 herbs and spices. The product is what?

- A. Strega
- B. Galliano
- C. Frangelico
- D. Sambuca

70. A consumer is asked which premium French orange liqueur uses Cognac as its base spirit rather than neutral grain spirit. The brand is what?

- A. Cointreau

- B. Combier
- C. Curaçao Bols
- D. Grand Marnier

71. A bartender is told that the cream liqueur launched in 1974 essentially created the modern dairy cream liqueur category. The product is what?

- A. Carolans Irish Cream
- B. Bailey's Irish Cream
- C. Saint Brendan's Irish Cream
- D. Amarula Cream Liqueur

72. A consumer asks which Mexican coffee liqueur is the foundational ingredient in the Espresso Martini. The brand is what?

- A. Tia Maria
- B. Sambuca Romana
- C. Kahlúa
- D. Patrón XO Café

73. A bartender wants to identify the Italian liqueur produced in Piedmont and made primarily from hazelnuts. The product is what?

- A. Disaronno Originale
- B. Strega Liquore
- C. Galliano L'Autentico
- D. Frangelico

74. A consumer is told that the famous Danish cherry liqueur is essential to the original Singapore Sling cocktail. The product is what?

- A. Cherry Heering
- B. Maraschino Luxardo
- C. Crème de Cerise
- D. Kirschwasser

75. A bartender is asked which French liqueur is made from blackcurrants and is the foundation of the Kir cocktail. The product is what?

- A. Crème de Mûre
- B. Crème de Framboise
- C. Crème de Cassis
- D. Chambord Royale

76. A consumer is told that the distinctive Italian liqueur Limoncello is traditionally produced on which Italian coast?

- A. The Adriatic coast around Rimini
- B. The Amalfi coast around Sorrento
- C. The Ligurian coast around Genoa
- D. The Sicilian coast around Palermo

77. A bartender wants to identify the bitter aperitivo created by the Barbieri brothers in Padua in 1919. The product is what?

- A. Campari

- B. Cynar
- C. Punt e Mes
- D. Aperol

78. A consumer asks which historical bartender is widely credited as the father of American mixology and published the first cocktail book in 1862. The person is what?

- A. Jerry Thomas
- B. Harry Johnson
- C. Charles H. Baker
- D. David Embury

79. A bartender is told that Sasha Petraske founded an influential New York City bar in 1999 that helped launch the modern cocktail renaissance. The bar was named what?

- A. Pegu Club
- B. Death & Co
- C. Milk & Honey
- D. Employees Only

80. A consumer asks which historical event drove many American bartenders abroad and spread American mixology globally. The event was what?

- A. The Civil War (1861–1865)
- B. American Prohibition (1920–1933)
- C. The Great Depression of the 1930s
- D. World War II (1941–1945)

81. A bartender wants to identify the earliest known printed definition of "cocktail," published in 1806 in The Balance and Columbian Repository. The four required ingredients in that definition were what?

- A. Spirits, sugar, water, and bitters
- B. Wine, sugar, water, and herbs
- C. Brandy, juice, sugar, and ice
- D. Spirits, vermouth, citrus, and bitters

82. A consumer is told that the U.S. standard pour for a single shot of distilled spirits in most professional bars is what?

- A. 1.0 fluid ounce
- B. 1.25 fluid ounces
- C. 2.0 fluid ounces
- D. 1.5 fluid ounces

83. A bartender is asked which essential bar tool is used to portion ingredients accurately, with the standard American version having two sides. The tool is what?

- A. Hawthorne strainer
- B. Jigger
- C. Bar spoon
- D. Mixing glass

84. A consumer is told that double-straining a cocktail involves what?

- A. Pouring the drink through cheesecloth twice
- B. Filtering the drink through two charcoal columns

- C. Straining through both a Hawthorne and a fine mesh strainer simultaneously
- D. Shaking the drink for twice the normal duration

85. A bartender wants to identify the long-handled spoon used for stirring cocktails. The tool is what?

- A. Bar spoon
- B. Stirring fork
- C. Cocktail wand
- D. Mixing rod

86. A consumer asks why Martinis should be stirred rather than shaken, according to classic professional rules. The reason is what?

- A. Stirring is faster than shaking and reduces wait times
- B. Shaking would dissolve the olive garnish prematurely
- C. Shaking produces too cold a finished drink
- D. Stirring preserves clarity and silky mouthfeel without aerating the spirit

87. A bartender wants to identify the technique of preparing a cocktail directly in the serving glass. The technique is what?

- A. Layering by density
- B. Building, used for the Old Fashioned and Mojito
- C. Rolling between vessels
- D. Throwing through the air

88. A consumer is told that the classic 2:1:1 sour family ratio represents which proportions?

- A. Two parts citrus, one part spirit, one part sweetener
- B. Two parts sweetener, one part spirit, one part citrus
- C. Two parts spirit, one part citrus, one part sweetener
- D. Two parts ice, one part spirit, one part fruit purée

89. A bartender is asked which classic cocktail is built on Cognac, Cointreau, and lemon juice in the standard sour ratio. The cocktail is what?

- A. Sidecar
- B. White Lady
- C. Aviation
- D. Vieux Carré

90. A consumer asks which classic cocktail combines gin, lemon juice, and Cointreau in the sour family ratio, sometimes considered the gin counterpart to the Sidecar. The cocktail is what?

- A. Aviation
- B. Bee's Knees
- C. White Lady
- D. Tom Collins

91. A bartender is told that the classic Negroni is built on equal parts of which three ingredients?

- A. Vodka, Aperol, and dry vermouth
- B. Bourbon, Campari, and sweet vermouth
- C. Gin, Cynar, and bianco vermouth

D. Gin, Campari, and sweet vermouth

92. A consumer is asked which classic cocktail substitutes Bourbon or rye for the gin in a Negroni. The cocktail is what?

A. Old Fashioned

B. Boulevardier

C. Vieux Carré

D. Black Manhattan

93. A bartender wants to identify the classic cocktail built on rye whiskey, an absinthe rinse, sugar, and Peychaud's bitters. The cocktail is what?

A. Sazerac

B. Old Fashioned

C. Manhattan

D. Vieux Carré

94. A consumer is told that the French 75 is built on gin, lemon juice, simple syrup, and which sparkling wine?

A. Prosecco from Veneto

B. Cava from Catalonia

C. Champagne from France

D. Asti Spumante from Piedmont

95. A bartender is asked which classic Cuban cocktail is built on white rum, lime juice, sugar, and fresh mint with soda water added at the end. The cocktail is what?

- A. Cuba Libre
- B. Daiquiri
- C. Hemingway Special
- D. Mojito

96. A consumer is told that the Mai Tai cocktail was created in 1944 by which legendary tiki bartender?

- A. Trader Vic (Victor Bergeron)
- B. Donn Beach (Don the Beachcomber)
- C. Steve Crane
- D. Ernest Gantt

97. A bartender wants to identify the classic Caribbean cocktail built on Cuban rum, cola, and a squeeze of fresh lime. The cocktail is what?

- A. El Presidente
- B. Cuba Libre
- C. Hemingway Daiquiri
- D. Mojito Especial

98. A consumer asks why time is the only thing that can reduce blood alcohol concentration after drinking. The accurate explanation is what?

- A. Alcohol bonds permanently with red blood cells
- B. The body must rebuild liver enzymes between drinks

C. Alcohol is eliminated only through kidney filtration

D. The liver metabolizes alcohol at a roughly fixed rate of one standard drink per hour

99. A bartender is told that the U.S. legal blood alcohol concentration limit for driving for adults age 21 and over is what?

A. 0.10 percent BAC

B. 0.06 percent BAC

C. 0.08 percent BAC

D. 0.04 percent BAC

100. A consumer asks why dram shop liability matters to bar owners. The accurate explanation is what?

A. It holds establishments legally responsible for harm caused by intoxicated guests

B. It limits the federal excise tax on alcohol sales

C. It requires bars to verify the age of every customer

D. It mandates the use of jiggers for every pour in every state

PRACTICE EXAM 8: ANSWER KEY AND EXPLANATIONS

1. C — 78.4 degrees Celsius is the boiling point of pure ethanol at standard atmospheric pressure, significantly lower than water's 100 degrees Celsius. This difference in boiling points is the foundational physical principle that makes distillation possible, allowing distillers to separate alcohol from water by careful temperature control.
2. A — The reflux ratio refers to the proportion of vapor that condenses and falls back into the column versus what passes upward to the next plate. A higher reflux ratio produces a cleaner, higher-proof spirit by giving heavier compounds more chances to fall back, while a lower ratio retains more congeners and character.
3. D — Copper chemically removes sulfur compounds from the spirit during distillation, dramatically improving flavor by binding with sulfides that would otherwise produce off-aromas. This chemical interaction is why nearly every premium distillery uses copper stills despite the much higher cost compared to stainless steel.
4. B — *Saccharomyces* (particularly *Saccharomyces cerevisiae*) is the yeast genus responsible for nearly all commercial alcoholic fermentation. This organism efficiently converts sugars into ethanol and carbon dioxide and is the foundation of beer, wine, and spirit production worldwide.
5. B — The wash is the fermented liquid (essentially a low-strength beer or wine) that is sent to the still for distillation. It typically contains 6 to 10 percent alcohol after fermentation and serves as the raw material that the distiller concentrates into finished spirit.
6. A — Isoamyl acetate is the primary ester responsible for the characteristic banana and pear aromas in many spirits. It is one of the most abundant esters produced during fermentation and its concentration is influenced by yeast strain selection and fermentation conditions.
7. D — Single distillation in the alambic armagnacais produces a spirit at approximately 52 to 60 percent ABV off the still, much lower than Cognac's double-distilled product at around 70 percent ABV. This lower distillate proof contributes to Armagnac's fuller, more characterful style.
8. C — Russian vodka traditionally contains 40 percent ABV (80 proof), the same as the U.S. minimum. This 40 percent standard is rooted in the work of Dmitri Mendeleev and has become the cultural and legal standard for classic Russian vodka.

9. A — Tito's Handmade Vodka is unusual among large-volume American vodkas in being made from corn in pot stills rather than column stills. The pot still production at Tito's commercial scale is highly unusual and has helped earn the brand its reputation for character and quality.
10. D — Absolut is owned by Pernod Ricard, the French spirits conglomerate that acquired the Swedish brand in 2008. Pernod Ricard's portfolio also includes Jameson, Chivas Regal, Beefeater, and many other major international spirit brands.
11. B — Below 40 percent ABV in the United States, vodka is permitted only as flavored vodka, which has a lower minimum bottling strength of 30 percent ABV. Unflavored vodka must meet the 40 percent minimum to qualify for the standard category.
12. C — Coriander seed is the second most common gin botanical after juniper itself and contributes a warm, slightly citrusy, slightly spicy character. It appears in nearly every classic London Dry recipe and provides much of the lemony brightness that complements juniper's pine notes.
13. A — Bombay Sapphire's vapor-infusion still is called a Carterhead still, named after its 19th-century inventor. The still suspends botanicals in a basket through which the alcohol vapors pass, producing a lighter, more delicate botanical character than steeping methods.
14. D — The London Dry designation is a strict purity standard prohibiting any post-distillation additions of flavoring, sweetening, or coloring. All character and any sweetness must come from botanicals introduced during the distillation process itself, which is why gins like Hendrick's cannot legally bear the London Dry label.
15. C — Plymouth Original is bottled at 41.2 percent ABV and is produced exclusively at the Black Friars Distillery in Plymouth, England. The distillery has been making Plymouth Gin continuously since 1793.
16. B — Tanqueray No. Ten is distinguished from standard Tanqueray London Dry by the use of fresh whole citrus fruits during distillation, including oranges, limes, and grapefruits. This citrus-forward production gives Tanqueray No. Ten its brighter, more aromatic character.
17. A — Caorunn is the Scottish gin produced in the Highlands using 11 botanicals including five Celtic botanicals such as Coul Blush apples, rowan berry, heather, dandelion, and bog myrtle. The brand emphasizes its Highland identity and locally sourced botanicals.
18. D — The Distillers Company Limited was the major Scotch industry conglomerate that was eventually absorbed through a series of mergers into Diageo, which is now the largest spirits company in the world. Diageo owns most of the historic Scotch whisky portfolio.
19. C — "Natural color" is the label term that indicates a Scotch whisky has not had any caramel coloring added. Many distilleries add small amounts of E150A caramel for visual consistency across batches, and producers who do not add it often market the fact as a quality differentiator.

20. A — The Scotch term "vatted malt" was officially replaced in 2009 by "blended malt Scotch whisky" under the Scotch Whisky Regulations. The new terminology was adopted to clarify the category for consumers and standardize the labeling rules.
21. B — The Lowland region contains Glenkinchie and Auchentoshan, both producing lighter-bodied malts that historically used triple distillation in the Irish style. Lowland malts are generally gentler and more approachable than the bolder Highland and Islay styles.
22. D — Bowmore is the oldest licensed distillery on Islay, dating to 1779, and is one of the most historically significant Scotch whisky producers in Scotland. Its long heritage and traditional production methods make it an important part of Islay's whisky tradition.
23. C — Ardbeg is famous for producing whisky with the densest, most heavily peated character on Islay and has marketed itself with the "peatiest of the peaty" tagline. Its 10-year expression is one of the most distinctive heavily peated single malts in the world.
24. A — Glenmorangie is famous for its tall stills (the tallest in Scotland) and produces a notably honeyed, slightly heathery Highland single malt. The tall stills allow only the lightest vapors to reach the condenser, producing a particularly elegant, refined spirit.
25. C — Tomatin was once the largest distillery in Scotland by capacity, with 23 stills at its peak. The distillery has since reduced its production but retains its historical significance as a former giant of Scotch whisky output.
26. A — Single Pot Still Irish whiskey was originally developed as a tax-avoidance strategy in response to a 19th-century British tax on malted barley. Irish distillers avoided the tax by including substantial proportions of unmalted barley in their mashes, creating the distinctive style that survives today.
27. D — Kilbeggan Traditional is the flagship blended Irish whiskey from Cooley Distillery (now part of Beam Suntory). The brand revives the historic Kilbeggan name from one of Ireland's oldest distilleries.
28. B — Most Irish whiskey lacks peat character because most Irish distilleries use closed kilns with smokeless heat sources to dry their malted barley. This is a production choice rather than a legal requirement, and produces the smooth, unsmoked character that defines most Irish whiskey.
29. D — Redbreast is the famous Single Pot Still Irish whiskey from Midleton Distillery aged in former Sherry casks. It is considered one of the finest examples of the Single Pot Still style and offers expressions in 12-year, 15-year, and 21-year bottlings.
30. A — American Bourbon must be aged in new, charred oak containers, which is one of the four core legal requirements for the category. This single-use barrel rule is why Bourbon barrels are exported worldwide for use by Scotch, rum, and tequila producers after their first fill.

31. C — Bourbon may enter the barrel at no more than 125 proof (62.5 percent ABV) and still qualify as Bourbon. This entry proof maximum ensures the spirit retains the right balance for proper maturation in oak.
32. B — Straight Bourbon must be aged for at least two years in new charred oak. If a Straight Bourbon is younger than four years, the actual age must be stated on the label.
33. A — Blanton's, launched in 1984 at Buffalo Trace Distillery, was the first commercial single barrel Bourbon. The brand established the single barrel category and remains highly sought after today, with each bottle bearing the specific barrel number and warehouse location.
34. D — Tennessee Whiskey is not legally classified as Bourbon because it undergoes the Lincoln County Process (filtering through maple charcoal) before barreling. While it meets all the other Bourbon requirements, this additional step makes it a separate legal category.
35. C — The Bottled-in-Bond Act was passed in 1897 as one of the earliest consumer protection laws in U.S. spirits regulation. It was passed at a time when American whiskey was widely adulterated and created a federal guarantee of authenticity.
36. B — Rye Whiskey was nearly extinct in the United States during the mid-20th century but has experienced a dramatic revival since the early 2000s, fueled by the cocktail renaissance and growing interest in classic American spirits. Brands like Rittenhouse, Sazerac, and Bulleit Rye have led the revival.
37. A — Diageo owns the Crown Royal brand, which was originally created in 1939 to commemorate the visit of King George VI and Queen Elizabeth to Canada. Crown Royal is the best-selling Canadian whisky in the United States.
38. C — Crown Royal Northern Harvest Rye was named World Whisky of the Year by Jim Murray's Whisky Bible in 2016, putting Canadian whisky on the global stage in a way the category had not enjoyed in decades. The award sparked a major revival of interest in premium Canadian whisky.
39. D — Hakushu is the Suntory distillery located in the southern Japanese Alps and is known for producing lighter, more delicate whiskies with herbal and forest characteristics. The high-altitude location and pristine water sources contribute to its distinctive style.
40. B — Until the 2021 voluntary standards adopted by the Japan Spirits and Liqueurs Makers Association, Japanese whisky labeling rules had no requirement that the spirit actually be made or aged in Japan. This loophole allowed some products to contain substantial imported Scotch under the "Japanese whisky" label.
41. D — Paul John is based in Goa on India's western coast and is one of the leading Indian single malt producers. The brand has earned significant international recognition since launching in the early 2010s.

42. A — Cognac must be produced from designated grapes (primarily Ugni Blanc) in the legally defined Cognac region of France, which is what distinguishes it from other French brandies. The strict appellation rules cover grape varieties, distillation methods, aging, and labeling.
43. C — Rémy Martin is the only major Cognac house that produces exclusively Fine Champagne expressions, meaning all of its products are blended only from Grande Champagne and Petite Champagne crus, with at least 50 percent from Grande Champagne. No other major Cognac house operates under this self-imposed restriction.
44. B — The typical Cognac aging vessel holds approximately 350 liters, the traditional size for the Limousin or Tronçais oak barrels used in Cognac maturation. This barrel size provides the optimal surface-to-volume ratio for the slow oxidative aging characteristic of Cognac.
45. D — VS (Very Special) is the entry-level Cognac age designation requiring a minimum of two years aging for the youngest brandy in the blend. The other major designations are VSOP (4 years), Napoleon (6 years), and XO (10 years since 2018).
46. A — Single distillation in a continuous column still called the alambic armagnacais is unique to Armagnac among major French brandy regions. This single-distillation method produces a fuller-bodied, more characterful spirit at a lower proof than Cognac's double-distilled product.
47. C — Brandy del Penedès is produced in Spain from grape varieties also used to make Cava sparkling wine, particularly Macabeo, Parellada, and Xarel-lo. The Penedès region in Catalonia is the heart of Spanish sparkling wine production.
48. B — Pisco Aromático is the Peruvian Pisco style made from a single aromatic grape variety such as Italia, Moscatel, Albilla, or Torontel. These aromatic varieties produce intensely floral, perfumed Piscos that contrast with the more neutral Quebranta-based styles.
49. D — Calvados Pays d'Auge AOC requires double distillation in pot stills, mirroring Cognac production methods. It is the most prestigious Calvados sub-appellation and uses a higher proportion of bittersweet cider apples than other Calvados appellations.
50. A — Grappa is the Italian fruit brandy made from grape pomace — the skins, seeds, and stems left over after wine production. The pomace still contains residual juice and sugars that can be fermented and distilled, traditionally turning a winemaking byproduct into a salable spirit.
51. C — Black Tot Day is the date that commemorates the end of the Royal Navy daily rum ration on July 31, 1970. The end of the ration concluded over 300 years of naval rum tradition and is still observed by rum enthusiasts and former naval personnel.
52. B — Puerto Rico became the world's largest rum producer thanks to Bacardi, which relocated to Puerto Rico after the Cuban Revolution and built massive production facilities at Cataño. Puerto Rico now produces more rum than any other single nation.

53. A — Brazilian cachaça must be made from fresh sugarcane juice rather than molasses, which is the defining legal distinction between cachaça and rum. The 2013 U.S.-Brazil agreement formally recognized cachaça as a distinctive Brazilian product distinct from the rum category.
54. D — Jamaica is the Caribbean nation most strongly associated with high-ester, funky pot still rums made using long fermentations and dunder. Producers like Hampden Estate, Worthy Park, and Long Pond produce some of the most intensely flavored rums in the world.
55. B — The Diamond Distillery in Guyana operates several historic stills found nowhere else in the world, including the only working wooden Coffey still. These unique pieces of equipment contribute to the distinctive intense, full-bodied character of Demerara rums.
56. C — Mount Gay Distillery in Barbados traces its founding to 1703 and is often called the world's oldest rum brand. Barbados is the historical birthplace of commercial rum production, dating to the 1640s.
57. A — The agave plant stores its primary carbohydrate as inulin, a complex chain of fructose molecules that yeast cannot ferment directly. The plant must be cooked to break down the inulin into simple fermentable sugars before distillation can occur.
58. D — Tequila must be made from *Agave tequilana* Weber, variedad azul (blue Weber agave). This single agave species is legally required for tequila production and was selected by German botanist Franz Weber in the 1890s for its high sugar content and rapid maturation.
59. B — 100 percent Agave Tequila contains only sugars derived from blue Weber agave, with no other added sugars permitted. Mixto Tequila, by contrast, requires only 51 percent agave sugars and may contain up to 49 percent other sugars such as cane sugar.
60. C — Tequila Añejo must be aged in oak barrels of no more than 600 liters for at least one year and up to three years. The longer aging produces deeper amber color, more pronounced oak character, and additional complexity.
61. C — A tahona is the large stone wheel pulled by mule or tractor that traditionally crushes cooked agave on a stone pad. While modern roller mills have largely replaced tahonas, some premium tequila producers still use them for their traditional character contribution.
62. A — Espadín (*Agave angustifolia*) accounts for approximately 90 percent of all mezcal production. Its relatively quick maturation and versatile character make it the workhorse agave of the mezcal category.
63. D — The distinctive smoky character of traditional mezcal results from cooking the agave piñas in earthen pit ovens over wood fires. The pit oven cooking, which can last several days, infuses the agave with the smoke character that defines authentic mezcal.

64. B — Sotol is the Mexican spirit technically not made from agave but from the desert spoon plant *Dasylirion*, which grows in the high desert regions of Chihuahua, Coahuila, and Durango. The plant is botanically distinct from agave despite the visual resemblance.
65. A — Pulque is the traditional Mexican fermented agave beverage that predates Spanish conquest and is the historical ancestor of distilled agave spirits. It is consumed at 4 to 6 percent ABV and remains a fermented (not distilled) beverage made from the aguamiel of certain agave species.
66. C — Chartreuse is produced by the Carthusian monks from a recipe of 130 herbs and plants, making it one of the most botanically complex liqueurs in the world. The recipe is one of the most closely guarded secrets in the spirits industry, known only to a small number of monks at a time.
67. D — Campari is the Italian aperitivo created in 1860 by Gaspare Campari and originally colored with carmine derived from cochineal insects. The brand switched to artificial coloring in 2006 to standardize production and reduce reliance on the insect-derived dye.
68. B — Cynar is the Italian amaro uniquely flavored with artichoke (*Cynara scolymus*), from which the name derives. The vegetal, earthy bitterness of artichoke gives Cynar a distinctive character unlike anything else in the Italian amaro category.
69. A — Strega is the Italian liqueur with the distinctive bright yellow color from saffron, made in Benevento from 70 herbs and spices. Its complex herbal character and bright color have made it one of the most recognizable Italian liqueurs.
70. D — Grand Marnier uses Cognac as its base spirit rather than the neutral grain spirit used in standard triple secs like Cointreau. The Cognac base gives Grand Marnier a richer, more complex character that distinguishes it from the dry, citrus-forward profile of typical triple sec.
71. B — Bailey's Irish Cream, launched in 1974, essentially created the modern dairy cream liqueur category by combining Irish whiskey with dairy cream, sugar, and flavoring in a stable homogenized formulation. It remains one of the best-selling liqueurs in the world.
72. C — Kahlúa is the foundational ingredient in the Espresso Martini, alongside vodka and fresh espresso. The Mexican coffee liqueur provides the cocktail's distinctive coffee character and balanced sweetness.
73. D — Frangelico is the Italian liqueur produced in Piedmont and made primarily from hazelnuts. Bottled in a distinctive monk-shaped bottle, it has become one of the most recognizable Italian liqueurs internationally.
74. A — Cherry Heering is the Danish cherry liqueur famous as the secret ingredient in the original Singapore Sling cocktail. Created in 1818, it remains one of the most distinctive cherry liqueurs in the world.

75. C — Crème de Cassis is the French liqueur made from blackcurrants, traditionally produced in Burgundy and used in the classic Kir cocktail (white wine and cassis) and Kir Royale (Champagne and cassis).
76. B — Limoncello is traditionally produced on the Amalfi coast around Sorrento, where the protected Sfusato lemon variety grows. The lemons of this region have particularly aromatic peels that contribute to the distinctive character of authentic limoncello.
77. D — Aperol was created in 1919 by the Barbieri brothers in Padua, Italy. Despite its modern global popularity through the Aperol Spritz, the product has been continuously produced for over a century in its hometown.
78. A — Jerry Thomas is widely credited as the father of American mixology and published the first cocktail book ever printed in 1862, *How to Mix Drinks, or The Bon-Vivant's Companion*. He worked at the Metropolitan Hotel in New York and other prestigious bars during the Golden Age of Cocktails.
79. C — Sasha Petraske founded Milk & Honey in Manhattan in 1999, helping launch the modern cocktail renaissance. The bar's emphasis on classic technique, fresh ingredients, and historical recipes helped reset standards for craft bartending worldwide.
80. B — American Prohibition from 1920 to 1933 drove many of the best American bartenders abroad to Cuba, London, Paris, and other cocktail-friendly cities, spreading American mixology globally. This international diaspora established cocktail traditions that survived long after Prohibition ended.
81. A — The 1806 definition of "cocktail" published in *The Balance and Columbian Repository* required spirits, sugar, water, and bitters as the four essential ingredients. This four-ingredient template is preserved today in the modern Old Fashioned cocktail.
82. D — The standard pour for a single shot of distilled spirits in U.S. professional bars is 1.5 fluid ounces (approximately 44 milliliters). Most cocktail recipes are built around this 1.5-ounce measure as the base spirit quantity.
83. B — The jigger is the bar tool used to portion ingredients accurately, with the standard American version having 1.5-ounce and 0.75-ounce sides. Accurate measurement with a jigger is essential to consistency in professional cocktail preparation.
84. C — Double-straining means using both a Hawthorne strainer and a fine mesh strainer simultaneously to catch tiny ice shards, herbal fragments, and other small particles. This technique is essential for cocktails containing muddled ingredients or fresh herbs.
85. A — The bar spoon is the long-handled spoon used for stirring cocktails. Its twisted shaft allows the bartender to rotate the spoon smoothly between the fingers while maintaining contact with the bottom of the mixing vessel.

86. D — Stirring preserves clarity and silky mouthfeel without aerating the spirit, which is why Martinis and other spirit-only cocktails are traditionally stirred rather than shaken. Shaking would aerate the drink and produce a cloudy, frothy result inappropriate for the classic Martini presentation.
87. B — Building means constructing a cocktail directly in the serving glass, typically by adding ingredients in sequence over ice. Drinks like the Old Fashioned, the Mojito, and the Gin and Tonic are built rather than shaken or stirred.
88. C — The classic 2:1:1 sour family ratio is two parts spirit, one part citrus, and one part sweetener. This template applies to the Whiskey Sour, Margarita, Daiquiri, Sidecar, and many other sour family classics.
89. A — The Sidecar is the classic Cognac-based sour, combining Cognac, Cointreau, and lemon juice in the 2:1:1 sour ratio. It is traditionally served in a sugar-rimmed glass and is one of the foundational members of the sour family.
90. C — The White Lady combines gin, lemon juice, and Cointreau in the classic 2:1:1 sour ratio. It is the gin-based example of the universal sour template and is often considered the gin counterpart to the Sidecar.
91. D — The classic Negroni is built on equal parts gin, Campari, and sweet vermouth, stirred with ice and served in a rocks glass. The equal-parts construction is one of its most distinctive features and makes the drink easy to remember and prepare.
92. B — The Boulevardier substitutes Bourbon or rye for the gin in a Negroni while keeping the same equal parts Campari and sweet vermouth. The whiskey base produces a richer, fuller cocktail than the gin-based Negroni while preserving the bitter-sweet structure.
93. A — The Sazerac is built on rye whiskey, an absinthe rinse of the chilled glass, sugar, and Peychaud's bitters, finished with a lemon peel. Created in New Orleans in the 1830s, it is the official cocktail of the city.
94. C — The classic French 75 is built on gin, lemon juice, simple syrup, and Champagne. Created during World War I and named after the 75-millimeter French field gun, it has become one of the most popular Champagne-based cocktails in the world.
95. D — The Mojito is the classic Cuban cocktail built on white rum, lime juice, sugar, fresh mint, and soda water added at the end. It requires muddling the mint to release its essential oils and is one of the most popular Cuban cocktails worldwide.
96. A — Trader Vic (Victor Bergeron) created the Mai Tai in 1944 at his restaurant in Oakland, California. The drink combines aged Jamaican rum, agricole rum, orange curaçao, lime juice, orgeat, and simple syrup, and remains one of the most iconic tiki cocktails in the world.

97. B — The Cuba Libre is the Caribbean cocktail traditionally built on Cuban rum, cola, and a squeeze of fresh lime. Created during the Spanish-American War period, the name means "Free Cuba" and reflects the political moment of its creation.
98. D — The liver metabolizes alcohol at a roughly fixed rate of one standard drink per hour for a typical adult, and this rate cannot be accelerated by food, coffee, water, or any other intervention. Time is the only thing that reduces blood alcohol concentration.
99. C — The U.S. legal blood alcohol concentration limit for driving for adults age 21 and over is 0.08 percent. Some states have moved to a stricter 0.05 percent standard, but 0.08 percent remains the federal threshold linked to highway funding.
100. A — Dram shop liability holds establishments legally responsible for harm caused by intoxicated guests, including drunk driving accidents and other incidents. This legal framework gives bar owners powerful financial incentive to enforce responsible service practices among their staff.