

Certified CBD Consultant (CCBDC) Exam

Questions:

1. **True or False:** The use of cannabis became **federally** illegal in the United States after congress passed the Marijuana Tax Act of 1937.

- a. True
- b. False

2. Throughout history cannabis has been used for all of the following purposes **except**:

- a. Food
- b. Poison
- c. Medicine
- d. Building material
- e. Recreational & Religious purposes

3. Which of the following is considered a **secondary compound** found within the cannabis plant?

- a. Cellulose
- b. Fiber
- c. Protein
- d. Cannabinoids
- e. Vascular tissue

4. Which part of the cannabis plant **does not** typically contain any cannabidiol (CBD) or other cannabinoids?

- a. Flowers
- b. Sugar Leaves
- c. Hemp seeds/Cannabis seeds/Hemp Seed oil
- d. Trichomes

5. **True or False:** The **female** cannabis plant contains over 400 chemical compounds including cannabinoids, terpenes, and flavonoids.

- a. True
- b. False

6. This extraction technique is considered to be the most desirable “best” way to extract cannabis oil.

- a. Ethanol extraction
- b. Hydrocarbon extraction (propane, butane, etc.)
- c. Carbon dioxide extraction (supercritical CO₂)
- d. None of the above. All of the following are effective ways to safely extract cannabis oil when done properly and residual solvents are removed.

7. There are several acceptable techniques to extract cannabis oil and the secondary compounds found within cannabis. An advantage of **cold ethanol** extraction is that it can be used to also extract:

- a. Terpenes
- b. Decarboxylated (neutral) cannabinoids- CBD, THC, CBN, CBG, etc.
- c. Acidic cannabinoids- CBDA, THCA, CBNA, CBGA, etc.
- d. All extraction techniques result in the same extracted compounds.

8. Decarboxylation of cannabinoids from their acidic form (CBDA) to their neutral/active form (CBD) can occur by all the following **except**:

- a. Combustion
- b. CO₂ extraction techniques
- c. Time
- d. Soaking flowers in water
- e. Light

9. This cannabinoid is known for its intoxicating effects “high feeling”.

- a. Cannabidiol (CBD)
- b. Cannabinol (CBN)
- c. Tetrahydrocannabinol (THC)
- d. Cannabichromene (CBC)
- e. Cannabigerol (CBG)

10. Which of the following cannabinoids has been shown to induce appetite suppression in animal models/preclinical studies?

- a. Tetrahydrocannabivarin (THCV)
- b. Cannabinol (CBN)
- c. Tetrahydrocannabinol (THC)
- d. Cannabichromene (CBC)
- e. Cannabidiol (CBD)

11. **True or False:** Cannabidiol (CBD) has been shown to affect younger individuals more than older (>65 y/o).

- a. True
- b. False

12. Most research has focused on the decarboxylated (neutral) cannabinoids such as CBD and THC. The main reason for this is because:

- a. The acidic cannabinoids have relatively low bioavailability and therefore they are not absorbed as well as neutral cannabinoids.
- b. The acidic cannabinoids serve no purpose to plants or humans.
- c. There is no way to extract acidic cannabinoids.
- d. The neutral cannabinoids have no effect on the human endocannabinoid system.

13. This terpene is the only one which has been shown to directly activate CB2 receptors of the human endocannabinoid system.

- a. Terpinolene
- b. Humulene
- c. Linalool
- d. Nerolidol
- e. β -caryophyllene

14. The role/effect of flavonoids include all of the following **except:**

- a. They serve as a survival advantage for the plant which produces them.
- b. They are partly responsible for the color of plants.
- c. They are partly responsible for the intoxicating effects of THC.
- d. They are partly responsible for the taste and aroma of plants.

15. Which terpene is most likely to have calming/sedating properties?

- a. Limonene
- b. β -Myrcene
- c. Nerolidol
- d. α -Pinene
- e. Eucalyptol

16. True or False: Cannabis sativa produces several flavonoids which are only known to be produced by cannabis including cannflavin A, cannflavin B, and cannflavin C.

- a. True
- b. False

17. All are parts of the human endocannabinoid system **except**:

- a. Anandamide (AEA)
- b. Cannabidiol (CBD)
- c. Cannabinoid Type 1 receptor (CB1)
- d. Cannabinoid Type 2 receptor (CB2)
- e. Fatty acid amide hydrolase (FAAH)

18. The role of the human endocannabinoid system includes regulation of:

- a. The immune system
- b. Fertility
- c. Tumor surveillance
- d. Metabolism
- e. All of the above

19. Activation of the CB1 receptor has been shown to:

- a. Decrease nerve conduction
- b. Increase calcium channel activation
- c. Increase neurotransmitter release
- d. Increase cellular inflammation

20. The first reported evidence of the use of cannabis as a medicine comes from:

- a. Ireland after Dr. William O'shaughnessy realized the health benefits after visiting India.
- b. Dr. Raphael Mechoulam's lab in Israel when he discovered the molecular structure of THC.
- c. South America
- d. Ancient China from its use by Chinese Surgeons/Healers

21. The best way to ensure a cannabis-based product is of high quality and purity consumers can:

- a. Visit the farm where the cannabis was grown
- b. Review the certificate of analysis (COA) of the product
- c. Smell for fresh terpenes
- d. Only purchase product that has been extracted with hydrocarbons

22. A certificate of analysis (COA) of any cannabis-based product should include:

- a. Potency of the cannabinoids and terpenes
- b. Mold and bacterial counts
- c. Residual solvent and heavy metal analysis
- d. Pesticide analysis
- e. All of the above

23. Which of the following routes of administration has the longest duration of action?

- a. Rectal suppository
- b. Sublingual tincture
- c. Vaporization
- d. Edibles
- e. Smoking

24. Which route of administration has the quickest onset of action?

- a. Rectal suppository
- b. Sublingual tincture
- c. Smoking/Vaporization
- d. Edibles
- e. Neither, they all act equally

25. All of the following are used as solvents to extract cannabinoids **except**:

- a. Terpenes
- b. Ethanol
- c. Butane
- d. Carbon dioxide (CO₂)
- e. Propane

26. **True or False:** Cannabidiol (CBD) can affect mood and emotions by interacting/activating serotonin receptors.

- a. True
- b. False

27. Cannabidiol (CBD) might diminish the intoxicating effects of tetrahydrocannabinol (THC) by:

- a. Increasing THC breakdown
- b. Increasing levels of anandamide (AEA)
- c. Binding to the CB1 receptor to change its binding affinity of THC
- d. Inhibiting liver metabolism of THC

28. Cannabidiol (CBD) interacts with vanilloid receptors including transient receptor potential (TRPV1) which can lead to decreased pain. TRPV1 receptors are normally activated by:

- a. Painful stimuli
- b. Low pH (high acid)
- c. Heat
- d. Pressure
- e. All of the above

29. True or False: Cannabinoids can decrease pain by inhibiting the release of the excitatory neurotransmitters such as glutamate.

- a. True
- b. False

30. Cannabidiol (CBD) can inhibit pain by all of the following mechanisms except:

- a. Increasing our levels of natural endocannabinoids such as anandamide (AEA)
- b. Acting as an anti-inflammatory
- c. Increasing the number of pain receptors
- d. Increasing our natural level of endocannabinoids by competing with fatty acid binding proteins (FABPs)

31. Which of the following is true of inflammation?

- a. Excessive inflammation can lead to tissue damage.
- b. Inflammation is a necessary step required for healing.
- c. Excessive inflammation is associated with multiple health risks and diseases.
- d. Cannabidiol (CBD) as well as natural endocannabinoids have been shown to influence inflammation.
- e. All of the above.

32. The gastrointestinal system is abundant in endocannabinoid receptors making it an ideal target for cannabinoid therapy. Activation of endocannabinoid receptors has been shown to:

- a. Increase gastrointestinal motility.
- b. Decrease gastric acid secretion.
- c. Increase the likelihood of constipation.
- d. Decrease the immune function of the gastrointestinal system.

33. Cannabidiol (CBD) may assist with sleep disorders by:

- a. Decreasing anxiety.
- b. Increasing depression.
- c. Decreasing appetite.
- d. Increasing painful stimuli.
- e. None of the above.

34. **True or False:** Cannabidiol (CBD) and other endocannabinoids may assist individuals suffering from anxiety, depression, anger, sleep disorders, chronic pain, and substance abuse associated with post-traumatic stress disorder (PTSD).

- a. True
- b. False

35. **Bioavailability** is best defined as:

- a. The percentage of consumed drug which is excreted in the urine.
- b. The percentage of consumed drug which is excreted in the feces.
- c. The percentage of consumed drug which reaches the bloodstream.
- d. The percentage of consumed drug which is processed by the liver.

36. All of the following are true regarding first-pass metabolism **except**:

- a. It can convert drugs into other active or inactive compounds.
- b. It can be largely avoided by inhalational forms of cannabis consumption.
- c. It can affect/alter bioavailability.
- d. It can be avoided with oral administration of cannabis.

37. Which of the following routes of administration for cannabis has the highest bioavailability?

- a. Inhalational (Combustion/vaporization)
- b. Oral
- c. Sublingual
- d. Rectal
- e. Topical

38. When starting on cannabidiol (CBD) therapy, it is generally recommended to:

- a. Start at a low dose.
- b. Trial initial doses in the evenings to determine any sedating effects.
- c. Consider starting at higher doses when considering CBD isolate vs a broad or full-spectrum product.
- d. All of the above.

39. True or False: It is important to avoid making any claims regarding cannabidiol and other cannabis-based therapies that have not been evaluated by the Food & Drug Administration (FDA).

- a. True
- b. False

40. All of the following statements surrounding the safety of cannabidiol (CBD) are true except:

- a. Doses of CBD up to 1500mg have been well tolerated in human studies.
- b. CBD may affect drugs such as blood thinners but not medications including antibiotics or anti-seizure medications.
- c. Enzymes in the liver responsible for drug metabolism may be affected by administration of CBD.
- d. Most health concerns surrounding cannabis are related to public safety concerns with respect to the intoxicating effects of tetrahydrocannabinol (THC).