

B.Sc. FOOD SCIENCE & TECHNOLOGY
FOURTH SEMESTER
TECHNOLOGY OF BEVERAGE, PLANTATION CROPS & SPICES

BFST – 401

(Use Separate Answer Scripts for Objective & Descriptive)

Duration : 3 hrs.

Full Marks : 70

(PART-A: Objective)

Time: 20 min.

Marks: 20

Choose the correct answer from the following:

$IX \times 20 = 20$

1. In fortified wine alcohol Percentage should not exceed
 - a. 20
 - b. 21
 - c. 22
 - d. 23
2. Dry wine has no
 - a. Residual sugar
 - b. Moisture
 - c. Toxic compounds
 - d. None of the above
3. Vinification is a process of making
 - a. Tea
 - b. Coffee
 - c. Wine
 - d. Beer
4.wood barrels are used for aging of wine.
 - a. Teak
 - b. Sal
 - c. Oak
 - d. Hollong
5. Carbonation in soft drink is done through
 - a. High pressure processing
 - b. Pulse electric field
 - c. Spray drying
 - d. All of the above
6. Antioxidant used in soft drinks is /are
 - a. Ascorbic acid
 - b. BHA
 - c. BHT
 - d. Both a and b
7. Artificial sugar used in diet coke is
 - a. Sorbate
 - b. Fructose
 - c. Aspartame
 - d. Glucose
8.acid enhance the absorption of carbon dioxide
 - a. Phosphoric acid
 - b. Citric acid
 - c. Tartaric acid
 - d. Ascorbic acid
9. Winnowing is the method of
 - a. Breaking pods to release beans and pulp
 - b. Grinding beans to get cocoa mass
 - c. Separation of shell from bean
 - d. Extraction of cocoa butter

10. Chicory is obtained from
a. Leaf
c. Flower
b. Stem
d. Root
11. Which of the following nitrogenous compounds are not present in coffee
a. Caffeine
c. Trigonelline
b. Chlorogenic acid
d. None of the above
12. Pungency factor present in chilli is
a. Capsorubin
c. Capsanthin
b. Capsaicin
d. Capsine
13. *Theobroma cacao* is the botanical name of
a. Coconut
c. Cocoa
b. Vanilla
d. Cashew
14. Fermentation of cocoa removes
a. Pulp from pod
c. Beans from pod
b. Beans from pulp
d. None of the above
15. Curcumin is the pigment found in
a. Clove
c. Pepper
b. Turmeric
d. Ginger
16. Eugenol is the principal compound of
a. Saffron
c. Chilly
b. Clove
d. White pepper
17. Clove is
a. Root
c. Leaf
b. Bud
d. Fruit
18. The enzyme playing central role in black tea processing is
a. Protease
c. Papain
b. Polyphenol oxidase
d. Phosphatidase
19. Are a complex mixture of volatile compounds responsible for the aromatic characteristics of the spices
a. Oleoresins
c. Essential oils
b. Monoterpenes
d. Polyphenols
20. White pepper is conventionally made from
a. Ripe berries
c. Fermented berries
b. Unripe berries
d. Discoloured berries

PART-B : Descriptive

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Explain the processing of fruit based non distilled alcoholic beverage. 10
2. Enlist the additives used in beverage industry. 10
3. What are the active biochemicals components present in major spices? 10
4. Write a note on cocoa processing. 10
5. Write down the processing flowchart of
a. Fortified wine
b. Whisky
c. Ready to serve drink
d. Orthodox tea 2.5×4=10
6. Explain the processing steps involved in the production of
a. King of spice
b. Queen of spice
c. Cashew nut
d. Dates 2.5×4=10
7. a. How spices are useful for pharmacology. Explain
b. Fat bloom and sugar bloom in chocolate. 5+5=10
8. Write a note on coffee processing. 10

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