

Registration Number:

Date & session:



ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU -27

M.Sc Chemistry – III SEMESTER

SEMESTER EXAMINATION: OCTOBER 2022

(Examination conducted in December 2022)

CHOE 9518 : Life's Laboratories

Time: 1 ½ Hours

Max Marks: 35

This paper contains **7** printed pages and **35** questions

Answer ALL Questions. Each question carries 1 mark

1. The main aim of green chemistry is to reduce
 - a) pollution
 - b) temperature
 - c) efficiency
 - d) properties
2. Green chemistry uses feedstock derived from
 - a) chemicals
 - b) organic compounds
 - c) abundant waste
 - d) none of these
3. Green chemistry is also called as
 - a) Click chemistry
 - b) Organic chemistry
 - c) Environmental chemistry
 - d) Sustainable chemistry
4. What does algor mortis mean?
 - a) Discoloration of death
 - b) Coldness of death
 - c) Stiffness of death
 - d) Pallor of death
5. Why do muscles get stiff after death?
 - a) The muscle decomposes
 - b) The muscles run out of calcium
 - c) The muscles run out of ATP
 - d) The temperature of the body declines

CH OE 9518_A_22

6. The branch of forensic which involves the examination of evidences from firearms that may have been used in crime.
 - a. Engineering
 - b. Ballistics
 - c. Odontology
 - d. Anthropology

7. Which of the following is the first thing to be done by a crime scene investigator at a crime scene?
 - a. See the scene
 - b. Scan the scene
 - c. Secure the scene
 - d. Search for evidence

8. If the evidence at the crime scene is contaminated, the investigator must do which of the following?
 - a. Decontaminate the evidence
 - b. Must record this fact
 - c. Destroy the evidence
 - d. Bring the fact to the notice of superior

9. Forensic odontology is a branch of forensic science that deals with
 - a. Insects
 - b. Bone study
 - c. Fingerprints
 - d. Bite marks and teeth

10. Ignition quality of diesel fuel is expressed by an index called
 - a. Cetane number
 - b. Heptane number
 - c. Octane number
 - d. Carbon content

11. What is the byproduct obtained on producing biodiesel ?
 - a. Glycerin
 - b. Salt
 - c. Polymer
 - d. Methanol

12. Botulism is a form of :
- Volatile poison
 - Food poisoning
 - Pesticide
 - Metallic poisoning
13. Legal limit of blood alcohol levels for driving in India as prescribed by the Motor Vehicle Act, 1988 is
- 50 mg per 100 ml of blood
 - 60 mg per 100 ml of blood
 - 30 mg per 100 ml of blood
 - 80 mg per 100 ml of blood
14. Which of the following is derived from the hemp plant "Cannabis sativa"?
- Opium
 - Marijuana
 - MDMA
 - Crack
15. Which of the following are treatments offered by residential rehabilitation centres?
- Group work
 - Psychological interventions
 - Social skills training
 - All of the above
16. The chemical analysis test for methamphetamine is
- Marquis test
 - Scotts test
 - Both a & b
 - None of these
17. Which of the following is a stimulant illicit drug?
- Cocaine
 - Cannabis
 - Marijuana
 - Psilocybin mushroom

18. The process of heating of low acid foods prone to microbial spoilage in sealed containers to extend their shelf life is
- Anti-corrosive packaging
 - Retort packaging
 - Pharma packaging
 - Flexible packaging
19. The Ninhydrin reagent reacts with _____ in sweat.
- amino acids
 - fatty acids
 - chlorides
 - water
20. The most common type of fingerprint pattern is the
- Arch
 - Loop
 - Whorl
 - All of these
21. The lines on a fingerprint are known as
- Medullas
 - Ridges
 - Deltas
 - Cores



22. What type of fingerprint pattern is shown in the diagram?
- Arch
 - Loop
 - Wheel
 - Whorl

23. The type of perfumes which lasts for 8 hours is
- parfum
 - eau de parfum
 - eau de cologne
 - eau de toilette
24. Prolonged sleep deprivation can result in
- Impaired driving
 - Increased anxiety
 - Memory problems
 - All the above
25. What is the function of polyethylene in tetra pack?
- Mechanical rigidity
 - Gas barrier
 - Abrasion resistance
 - Liquid barrier
26. A _____ speaker looks into the eyes of the audience.
- confident
 - impatient
 - rude
 - impolite
27. The sleep wake cycle is an example of
- Circadian rhythm
 - Ultradian rhythm
 - Infradian rhythm
 - None of the above
28. Which of the following is an incorrect hair care procedure?
- Wash oily hair frequently
 - Concentrate shampoo on the tips of hair
 - Use a hot oil treatment twice a month
 - Use conditioner after every shampoo

29. Icing sugar is also called:
- Crystallized sugar
 - Pulverized sugar
 - Brown sugar
 - Castor sugar
30. Which of the following is not a cosmetic brand?
- a) Gillette b) Johnson's c) Unilever d) Nestle
31. Which of the following is NOT a function of a food additive?
- To maintain product consistency
 - Maintain nutritive value
 - Controlling acidity/alkalinity
 - None of the mentioned
32. Monosodium glutamate (MSG) in food is used as:
- Colour enhancer
 - Flavor enhancer
 - Emulsifier
 - All of these
33. The heat transfer in stewing and roasting occurs through
- conduction
 - convection
 - radiation
 - all of the above
34. Nicotene causes which of these changes in the body?
- Lowers body temperature
 - Raises heart rate
 - Raises blood pressure
 - b & c

35. A bullet is found by a medical officer while conducting a post-mortem examination. Which of the following is the most appropriate?
- a. Medical officer takes it out by a metallic tweezer, seals it in a glass bottle, puts the case details on the outside of the bottle, hands it over to the investigating officer, and obtains his signature.
 - b. Medical officer takes it out by his hands, seals it in a glass bottle, puts the case details on the outside of the bottle, hands it over to the investigating officer, and obtains his signature.
 - c. Medical officer takes it out by his hands, puts his signatures on the bearing surface of the bullet, seals it in a glass bottle, puts the case details on the outside of the bottle, hands it over to the investigating officer, and obtains his signature.
 - d. Medical officer takes it out by a metallic tweezer, puts his signatures on the bearing surface of the bullet, seals it in a glass bottle, puts the case details on the outside of the bottle, hands it over to the investigating officer, and obtains his signature.