

**Kamla Nehru Mahavidyalaya, Nagpur**  
**Department of Cosmetic Technology**  
**Bachelor of Cosmetic Technology (Semester-VIII)**  
**Subject: - (S8-T4) Quality Assurance Techniques**  
**MCQ Question Bank (Summer-2022)**

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1. Which of the following best describes a microbial control protocol that inhibits the growth of molds and yeast?  
a) Bacteriostatic      b) Fungicidal      c) Bactericidal      d) Fungistatic
2. Which type of test is used to determine whether disinfectant solutions actively used in a clinical setting are being used correctly?  
a) Disc diffusion assay      b) phenol coefficient test  
c) in use test      d) use- dilution test
3. The Function of Plasmids are: -  
a) DNA Replication    b) Protein Synthesis    c) Cell wall Synthesis    d) None of the above
4. The bacterial pili mainly contain  
a) Carbohydrates      b) Lipids      c) Proteins      d) Minerals
5. Bacillus is an example of  
a) Gram-positive bacteria    b) Gram-negative bacteria    c) Virus      d) Viroid
6. The effectiveness of heat in killing microorganisms is much greater in \_\_\_\_\_  
a) acid      b) alkali      c) neutral      d) acid and alkali
7. Which of the following actions occur due to low temperature?  
a) coagulation of protein      b) death of micro-organisms  
c) rate of metabolism is reduced      d) denature protein
8. Sterilization is done by autoclave consisting of exposure to steam about  
a) 120°C      b) 170°C      c) 121°C      d) 116°C
9. One of the common fungal diseases of the man  
a) Cholera    b) Plague    c) Typhoid      d) Ringworm
10. Mordant used in grams staining is \_\_\_\_\_  
a) Crystal Violet      b) Iodine      c) Saffranin      d) All of these
11. Staining material of gram-positive bacterium is  
a) Fast green      b) Haematoxylon      c) Crystal violet      d) Safranin
12. Rod-shaped bacteria are known as  
a) Cocci      b) Comma forms      c) Bacilli      d) Plemorphic froms

13. Gram-negative bacteria appear as

- a) Pink                      b) Violet                      c) Both a & b                      d) None of these

14. The number of the bacteria in sample is expressed as

- a) gm/ ml                      b) Kg/ml                      c) m/v                      d) cfu /g or /ml

15. In composition of nutrient agar the concentration of beef extract for 100 ml is

- a) 20 gm                      b) 2 gm                      c) 3 gm                      d) 0.3 gm

16. In gram staining ethanol is used as a

- a) Counter stain                      b) Primary stain                      c) Decolorizing agent                      d) None of the above

17. Which culture media is used to determine the minimum inhibitory concentration?

- a) Muller Hinton Agar                      b) Soybean casein digest agar  
c) Nutrient agar                      d) MacConkey agar

20. Which equipment is used for cultivating and growing microorganisms?

- a) Glass slide                      b) Aseptic Chamber                      c) Petri dish                      d) Incubator

21. EMB agar stands for\_\_\_\_\_.

- a) Ethylene methylene blue agar                      b) Eosin meat blue agar  
c) Eosin methylene blue agar                      d) Ethoxy methylene blue agar

22. The major constituents in agar are \_\_\_\_\_.

- a) Fats                      b) Aminoacids                      c) Polysaccharides                      d) Polypeptides

23. The BIS limit for total microbial count of eye product is \_\_\_\_\_.

- a) 10 cfu/ ml                      b) 1000 cfu/ ml                      c) 100 cfu/ ml                      d) 10000 cfu/ ml

24. Temperature required for pasteurization is\_\_\_\_\_.

- a) Above 150°C                      b) Below 100°C                      c) 110 °C                      d) None of these

25. Separation of a single bacterial colony is called\_\_\_\_\_.

- a) Isolation                      b) Separation                      c) Pure culturing                      d) All of these

26. Pressure required for autoclaving is\_\_\_\_\_.

- a) 20 psi                      b) 18 psi                      c) 15 psi                      d) 10 psi

27. Escherichia coli is gram positive bacteria. This statement is true or false.

- a) True                      b) False

28. Which equipment is used in the fractional sterilization?

- a) Autoclave                      b) Arnold steamer                      c) Hot oven                      d) Laminar flow cabinet

29. Staining procedure helps in production of contrast between bacteria and aqueous medium. This statement is true or false.

- a) True      b) False

30. From the following, which is the basic dye?

- a) Picric acid      b) India ink      c) Methylene blue      d) Eosin

31. The colonies produced by Pseudomonas on MacConkey's medium are \_\_\_\_\_.

- a) Purple Colored      b) Pink colored      c) Pale colored      d) Green colored

32. Common techniques used to differentiate Gram positive and Gram Negative groups of bacteria is known as ?

- a. Gram staining      b. Colour staining      c. KGram Staining      d. All of the above

33. \_\_\_\_\_ and \_\_\_\_\_ are common colours associated with Gram Staining.

- a. Pink and purple      b. Green and yellow      c. Blue and orange      d. Black and white

34. E. Coli is stained pink, therefore it is –

- a. Gram positive      b. Gram negative      c. Gram neutral      d. None of the above

35. Gram negative bacteria shows \_\_\_\_\_ colour when observed under microscope after the gram staining procedure.

- a. Sky blue      b. Olive green      c. Pink      d. Violet

36. The lipid contents of Gram positive bacteria are low.

- a. True      b. False

37. Gram staining is a \_\_\_\_\_ staining method.

- a. Differential      b. Indifferential      c. Unique      d. All of the above

38. The Gram negative cell envelope is thin and lipid contents are high.

- a. True      b. False

39. Gram positive bacteria has \_\_\_\_\_ peptidoglycan.

- a. Thin      b. Very thin      c. Thick      d. None of the above

40. Gram stain was developed by ?

- a. Christian Gram      b. GrahamBell      c. Abraham Linkan      c. Newton

41. In pour-plate method, the medium should be maintained at what temperature?

- a) 37 degree C      b) 67 degree C      c) 45 degree C      d) 0 degree C

42. Which of the following method can be used to determine the number of bacteria quantitatively?

- a) Streak-plate  
b) Spread-plate

- c) Pour plate
  - d) Pour-plate and spread plate
43. Isolation of pure culture refers to \_\_\_\_\_
- a. purification of culture
  - b. introduction of inoculum
  - c. separation of a single colony
  - d. to grow microorganisms on a surface
44. A large cluster of colonies are obtained in streak plate method.
- a) True
  - b) False
45. What is Microbiology?
- a) Study of molecules that are visible to human eyes
  - b) Study of animals and their family
  - c) Study of organisms that are not visible to naked eyes
  - d) Study of microscope
46. Who is known as the father of Microbiology?
- a) Edwin John Butler
  - b) Ferdinand Cohn
  - c) Robert Koch
  - d) Antoni van Leeuwenhoek
47. Which of the following are produced by microorganisms?
- a) Alcoholic beverages
  - b) Fermented dairy products
  - c) Breads
  - d) All of the mentioned
48. What is the approximate size of the bacterial cell?
- a) 1mm in diameter
  - b) 0.5 to 1.0 micrometer in diameter
  - c) 2mm in diameter
  - d) 2 micrometer in diameter
49. Glycolysis can occur in \_\_\_\_\_
- a) anaerobic cells
  - b) aerobic cells
  - c) neither aerobic and anaerobic cells
  - d) both aerobic and anaerobic cells
50. The bacterium *Staphylococcus aureus* is which type of bacteria?
- a) Mesophile
  - b) Mesophile and psychrophile
  - c) Psychrophile

d) Thermophile

51. Growth of bacteria or microorganisms refer to \_\_\_\_\_

- a) changes in the total population
- b) an increase in number of cells
- c) an increase in the size of an individual organism
- d) an increase in the mass of an individual organism

52. Which of the following method can be used to determine the number of bacteria quantitatively?

- a) Spread-plate
- b) Streak-plate
- c) Pour-plate and spread plate
- d) Pour plate

53. What are the cell wall structural components of fungi?

- a) peptidoglycan
- b) cellulose
- c) chitin
- d) chitin, cellulose, or hemicellulose

54. The principal microorganism for yogurt is \_\_\_\_\_

- a) *Leuconostoc citrovorum*
- b) *Streptococcus lactis*
- c) *Streptococcus thermophilus*
- d) *Lactobacillus acidophilus*

55. *Staphylococcus aureus* is a \_\_\_\_\_ bacteria.

- a. Gram negative
- b. Gram positive
- c. Both a & b
- d. None of these

56. Gram negative cells will acquire the color of \_\_\_\_\_.

- a. Mordant
- b. Counter stain
- c. Decolorizing agent
- d. None of these

57. Gram staining is a \_\_\_\_\_ laboratory technique used to differentiate bacterial species into two large groups.

- a. Bacteriological
- b. Virological
- c. Fungological
- d. None of these

58. Nutritional requirements of Gram Positive bacteria are generally complex, only few species are autotrophic.

- a. True
- b. False

59. In Gram staining reaction it is important not to allow a bacterial smear to dry.

a. True b. False

60. Different cell structures stain differently.

a. True b. False