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Department of Cosmetic Technology
Master of Cosmetic Technology Semester IV
Subject :- Cosmetic Microbiology
Question Bank Summer 2022

Note - Tick on the correct answer. Double ticked answers will be considered invalid.

(For Question No. 1 to 63 you have to find answers)

1. Which of the following is /are validation parameters?
   a. Certified reference material b. Duplicates and replicates c. Blanks d. All of the above
2. Method validation is a process by which a laboratory confirms by examination, and provides objective evidence, that the particular requirements for specific uses are fulfilled.
   a. True b. False
3. Validation studies must include comparison to a recognized reference method to demonstrate equivalence or increased performance, the significance of which must be determined statistically.
   a. True b. False
4. A method that is acceptable for its intended purpose is normally authenticated by a process known as _____ .
   a. Method Validation b. Identification c. Soxhlation d. Sterilization
5. Benzalkonium Chloride is used in?
   a. Wet wipes b. Hand sanitizers c. Ophthalmic preparations d. All of these
6. Benzoic acid is _____ .
   a. White solid b. Yellow liquid c. Brown compound d. None of these
7. Ethanol is effective in killing ?
   a. Bacteria b. Fungi c. Viruses d. All of these
8. _____ are homologous esters of para hydroxybenzoic acid.
   a. Parabens b. Aldehydes c. Tweens d. Isapgols
9. Which of the following preservatives can be used in cosmetic formulations?
   a. Parabens b. Benzalkonium Chloride c. Ethanol d. All of these
10. In general, cosmetic products are not considered to be sterile.
    a. True b. False
11. Which is not one of the HACCP principles?

a. Check the system b. Identify the hazard

c. Establish Critical control Point d. Establish corrective action

12. What is the third step of HACCP?

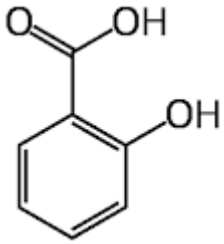
a. Establishing hazard analysis b. Establishing critical control limits

c. Establishing critical control points d. Verifying

13. What is the first step of risk assessment?

a. Exposure assessment b. Hazard identification c. Toxicity study d. Risk Characterization

14. The following is the structure of_____.



a. Paraben b. Acid c. Salicylic acid d. Zinc pyrithione

15. Which Microorganism are studied in Cosmetic Preparation ?

a. Yeast b. Fungi c. Bacteria d. All of these

16. What is the final stage of risk assessment?

a. Hazard identification b. Risk characterization c. Exposure assessment d. Toxicity assessment

17. Salicylic acid used for the treatment of:-

a. Acne b. Dandruff c. Dermatitis d. All of the above

18. An agent that prevents the growth of bacteria are known as _____ .

a. Bactericide b. Bacteriostatic c. Antimicrobial d. Antibiotic

19. What is the main objective of risk characterization?

a. Estimation of the potential for adverse health or ecological effects to occur from exposure to a stressor

b. Determination of pathways c. Estimation of exposure d. Collection of data

20. Containers, closures, and packaging materials can be sampled for receipt examination in the warehouse.

HACCP quiz multiple choice questions

21. **At its core what does HACCP stipulate?**

A. That companies should use the right ingredients in the preparation of food.

B. That all organisations involved in the food business should implement and maintain hygiene procedures based on HACCP principles.

C. That people should wash their hands before handling food.

D. That food processing organisations should keep their administrative records in good order.

22. **What does HACCP stand for?**
    A. Hazard Analysis and Critical Control Point
    B. Hazard And Critical Control Point
    C. Health Analysis and Critical Control Point
    D. Hazard And Critical Cooking Point
23. **What does Critical Control Point mean?**
    A. The point when food handlers must start to make administrative records in the HACCP system.
    B. The point when steam starts to rise from food being cooked.
    C. When bacteria starts to grow uncontrollably on food.
    D. It is a point, step or procedure at which control can be applied to prevent or eliminate a food safety hazard or reduce it to an acceptable level.
24. **What is a HACCP Plan?**
    A. A form that has to be filled in by all food handlers.
    B. A food hygiene rating scheme.
    C. A written document which is based upon the seven principles of HACCP, which clearly states the safety procedures to be followed to identify any hazards that must be avoided, removed or reduced.
    D. A system used in food hygiene auditing.
25. **What is a HACCP Team?**
    A. A team of highly trained chefs.
    B. A group of people who have the skills and knowledge needed to develop, implement and maintain a HACCP system.
    C. A team of government investigators.
    D. An office based team of administrative officials who specialise in food hygiene matters.
26. **What hazards does HACCP address?**
    A. It is used to guide businesses through the process of identifying food safety hazards.
    B. It highlights inaccuracies in an organisations administrative processes.
    C. It shows food handlers which utensils to use when cooking meals.
    D. It focuses on potential fire hazards within the food preparation area.
27. **Which of these would be a critical limit?**
    A. Washing vegetables before using them.
    B. Cooking chicken to reach a temperature of 165°F (74°C) for 15 seconds.
    C. Checking the use by date on canned ingredients.
    D. The temperature food is kept at in a fridge.
28. **What is the first stage of putting together a HACCP system?**
    A. Putting together a HACCP team.
    B. Making sure everyone has the correct forms that have to be filled in.
    C. Determining the product lines and distribution channels that should be included in the HACCP plan.

D. Creating a flow diagram that gives a simple and clear outline of the steps involved in the food process of the company.

29. **What sectors is HACCP applicable to?**

A. The motor industry and specifically the production line.
B. The airline industry.
C. Software development.
D. It is suitable to be implemented by organisations directly or indirectly involved in various sectors of the food industry and related supply chain.

30. **What are the benefits of implementing HACCP?**
    A. It assists businesses that work within the food preparation and supply industry to identify and manage key controls over processes and thereby ensure safe food.
    B. It helps organisations to keep accurate administrative records relating to food production.
    C. It keeps workers involved in food production on their toes.
    D. It helps to increase the profits of a company involved in food preparation.
31. **How many principles are there in a HACCP system?**
    A. Four
    B. Seven
    C. Eighteen
    D. Ten
32. **HACCP can not only prevent cases of food poisoning, it can also…..**
    A. Increase a company's profits.
    B. Make foot taste better.
    C. Help a company to comply with relevant food law regulations.
    D. Make food look more palatable.
33. **The recordkeeping requirements of a HACCP plan enables;**
    A. Food handlers to work faster.
    B. The company to save money by using less paper than it otherwise would.
    C. Investigators to audit a company and see how well they are complying with food safety laws over a set period.
    D. People to know what their colleagues are doing.
34. **What is the purpose of Protective Disposable Clothing?**
    A. It assists the food handler to maintain and upkeep their personal levels of hygiene, thereby helping to stop any food contamination.
    B. Makes the food handler look more professional.
    C. It helps food handlers to recognise each other and the work they do.
    D. It protects them in the case of an accident.
35. **Why must food must be thoroughly cooked to the correct time and temperature combination.**
    A. It helps to improve the taste.
    B. It makes the food look more attractive.
    C. It is a requirement of the law.
    D. It helps to kill harmful microbes that can cause disease.

36. **Which of the following is true about bacteria;**
    A. Bacteria multiplies and grows faster in warm environments.
    B. Bacteria needs air to survive.
    C. Every type of bacteria can give people food poisoning.
    D. By freezing food you can kill bacteria.
37. **In a place of work, the best way to dry your hands after washing them is to;**
    A. Use a cotton towel.
    B. Just shake excess water away.
    C. Use a air dryer.
    D. Use a paper towel.
38. **Which of the following sectors is HACCP applicable to;**
    A. Retailing
    B. Fast food takeaways
    C. Office administration
    D. Facilities management

TRUE OR FALSE QUESTIONS

39. **Accurate record keeping is NOT an important part of HACCP and overall food safety management.**
    True or false
40. **HACCP can be applied to industries other than food.**
    True or false
41. Which of the following types of medical items requires sterilization?

A. needles
B. bed linens
C. respiratory masks
D. blood pressure cuffs

42. Which of the following is suitable for use on tissues for microbial control to prevent infection?

A. disinfectant
B. antiseptic
C. sterilant
D. water

43. 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

44. The decimal reduction time refers to the amount of time it takes to which of the following?

A. reduce a microbial population by 10%
B. reduce a microbial population by 0.1%
C. reduce a microbial population by 90%
D. completely eliminate a microbial population

45. Which of the following methods brings about cell lysis due to cavitation induced by rapid localized pressure changes?

A. microwaving
B. gamma irradiation
C. ultraviolet radiation
D. sonication

46. Which of the following terms is used to describe the time required to kill all of the microbes within a sample at a given temperature?

A. D-value
B. thermal death point
C. thermal death time
D. decimal reduction time

47. Which of the following microbial control methods does not actually kill microbes or inhibit their growth but instead removes them physically from samples?

A. filtration
B. desiccation
C. lyophilization
D. nonionizing radiation

48. Which of the following refers to a disinfecting chemical dissolved in alcohol?

A. iodophor
B. tincture
C. phenolic
D. peroxygen

49. Which of the following peroxygens is widely used as a household disinfectant, is inexpensive, and breaks down into water and oxygen gas?

A. hydrogen peroxide
B. peracetic acid
C. benzoyl peroxide
D. ozone

50. Which of the following chemical food preservatives is used in the wine industry but may cause asthmatic reactions in some individuals?

A. nitrites
B. sulfites
C. propionic acid

D. benzoic acid

51. Bleach is an example of which group of chemicals used for disinfection?

A. heavy metals
B. halogens
C. quats
D. bisbiguanides

52. Which chemical disinfectant works by methylating enzymes and nucleic acids and is known for being toxic and carcinogenic?

A. sorbic acid
B. triclosan
C. formaldehyde
D. hexaclorophene

53. Which type of test is used to determine whether disinfectant solutions actively used in a clinical setting are being used correctly?

A. disk-diffusion assay
B. phenol coefficient test
C. in-use test
D. use-dilution test

54. The effectiveness of chemical disinfectants has historically been compared to that of which of the following?

A. phenol
B. ethyl alcohol
C. bleach
D. formaldehyde

55. Which of the following refers to a germicide that can kill vegetative cells and certain enveloped viruses but not endospores?

A. high-level germicide
B. intermediate-level germicide
C. low-level germicide
D. sterilant

56. The action of alcohol during Gramstaining is - a. Allows the color b. It adds color c. Decolorises the cells d. None of these

57. Lipid contents is more in a. Gram negative bacteria b. Gram positive bacteria c. Same in both d. None of these

58. Cell-wall is a. Thick in Gram positive than Gram negative b. Thick in Gram negative than Gram positive c. Equal in both d. In Gram negative cell-wall is absent

59. The Lipid content present in Gram positive bacterial cell-wall is a. 1-10 % b. 1-5 % c. 2-8 % d. None of these
60. The order of stains in Gram-staining procedure is a. Crystal violet, Iodine solution, Alcohol, Saffranine b. Iodine solution, Crystal Violet, Saffranine, Alcohol c. Alcohol, Crystal Violet, Iodine solution, Saffranine d. All of these
61. The percentage of alcohol used in Gramstaining is a. 75% b. 90% c. 60% d. 25%
62. Gram positive bacteria appear as a. Pink b. Violet c. both a & b d. None of these
63. Gram negative bacteria appear as a. Pink b. Violet c. both a & b d. None of these

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Some Questions with answers :-

1. What Gram-negative, oxidase positive bacilli has been implicated in eye infections and is highly resistant to antibacterial agents such as quaternary ammonium compounds? ***Pseudomonas aeruginosa***
2. Bacterial growth in makeup is promoted when you: ***All of the above (share makeup, exposure to light and heat, use makeup while you have an eye or skin infection)***
3. What test is used to determine if the preservative in a cosmetic is effective? ***Preservative Efficacy Test***
4. Sleeping with your eye makeup on isn't harmful to your eyes. ***False***
5. What microorganism produces chlamydospores? ***Candida albicans***
6. Products labeled as "All Natural" or "Hypoallergenic" won't cause allergic reactions. ***False***
7. What factors are important for producing safe cosmetic products? ***All of the above (environmental monitoring, prevention of biofilm formation, effective cleaning procedures)***
8. How often should mascara be replaced? ***3 months***
9. FDA approval is required to sell cosmetics in the United States. ***False***
10. Mannitol Salt Agar (MSA) is a selective agar used to isolate and differentiate what microorganism species known to contaminate cosmetic products? ***Staphylococcus aureus***
11. Choosing a personal care product for a cosmetic formulation is based on what factor? ***All of the above (water activity, pH, intended use)***
12. Guidelines for microbiological testing of cosmetics can be found in: ***All of the above (FDA Bacteriological Analytical Manual, Personal Care Product Council Microbiology Guidelines, ISO 11930)***

Some MCQs with answers -

1. Sterility testing can be done by using?

a. Direct inoculation method

b. Membrane filtration method

c. Pyrogen test

d. All of the above

2. Conditions provided for culture in direct inoculation method is/are?

a. Aerobic conditions

b. Anaerobic conditions

c. Both a and b

d. None of the above

3. Membrane filtration method can be used for sterility testing of?

a. Ophthamics

b. Parenterals

c. Antibiotics

d. All of the above

4. Size of pore size of membrane which is used for membrane filtration sterility testing?

a. 1 microns

b. 45 microns

c. 4 microns

d. 100 microns

5. Correct sequence for membrane filtration technique can be?

I. Washing of membranes for removing traces of antibiotics

II. Transfer of microorganism to culture media

III. Passing of formulations from membrane filter

IV. Identification tests of microbs

a. III – I – II – IV

b. III – II – I – IV

c. I – II – III – IV

d. I – III – II – IV

6. Which of the following statements are correct related with the pyrogen test according to IP?

I. 3 rabbits should be used the first time testing of product.

II. Same rabbits can be used once in a week for pyrogen testing

III. Test is passed if the sum of responses of three rabbits is not more than 5°C

IV. If test fails, in the second trial, 5 rabbits should be used for pyrogen testing

a. II, III

b. I, IV

c. II, IV

d. I, III

7. Sequence of true/false for the statements can be?

- **According to IP, first trial for pyrogen testing of product is passed when the sum of the responses of three rabbits is not more than 1.4°C, and the raise in temperature of the individual rabbit is less than 0.6°**
- **According to IP, first trial for pyrogen testing of product is passed when the sum of the responses of five rabbits is not more than 2.4°C, and the raise in temperature of the individual rabbit is less than 0.8°C**
- **According to IP, second trial for pyrogen testing of product is passed when the sum of the responses of eight rabbits is not more than 4.7°C, and the raise in temperature of the individual rabbit is less than 0.8°C**
- **According to IP, second trial for pyrogen testing of product is passed when the sum of the responses of eight rabbits is not more than 3.7°C, and the raise in temperature of the individual rabbit is less than 0.6°C**

a. FFTF

b. TFFT

c. FFTT

d. FTTF

ANSWERS

1-d

2-c

3-d

4-b

5-a

6-b

7-b

SOME MCQS With Answers :-

1. The medium used in membrane filter technique was a. EMB agar b. EMR-Vp medium c. Lactose broth d. Endo agar

2. Lysol is a a. Sterilent b. Disinfectant c. Antiseptic d. Antifungal agent

3. Which of the following is a neutral stain? a. Picric acid b. Gmiemsa c. Neutral red d. Malachite green

4. Peptone water medium is an example for a. Synthetic medium b. Semisynthetic medium c. Differential medium d. None of these

5. The method in which the cells are frozen dehydrated is called a. Pasteurization b. Dessication c. Disinfection d. Lypophilization

6. The techn ique used to avo id a l l microorganisms is accomplished by a. Sterlization b. Disinfection c. Surgical sterilization d. Disinfection Sterilization

7. Thermal death time is a. Time required to kill all cells at a given temperature b. Temperature that kills all cells in a given time c. Time and temperature needed to kill all cells d. All of the above

8. A culture medium the exact composition of which is not known was called as a. Simple b. Complex c. Defined d. Natural

9. Elek's gel diffusion test is used for the detection of a. Tetani toxin b. Cholera toxin c. Diophtheria toxin d. Toxoid

10. Temperature required for pasteurization is a. Above 150oC b. Below 100oC c. 110oC d. None of these

11. Separation of a single bacterial colony is calle a. Isolation b. Separation c. Pure culturing d. All of these

12. Wh ich of the fo l low ing is ion iz ing radiation? a. U.V. rays b. IR c. γ-rays d. None of these11 MCQs IN MICROBIOLOGY

13. Wh ich of the fo l low ing induces dimerisation of thymine? a. X-rays b. U.V. rays c. ã-rays d. None of these

14. When food material are preserved at a temperature just above freezing temperature, the process is called. a. Freezing b. Pasteurisation c. Chilling d. Frosting

15. Wh ich of the fo l low ing method of sterilization has no effect on spores? a. Drying b. Hot air oven c. Autoclave d. None of these

16. Treponema pa l l idum can be best indentified using a. Fluorescence microscope b. Bright field microscope c. Dark field microscope d. Flourescence microscope

17. Autoclaving is carried at a. Dry heat b. Atmospheric pressure c. 120oC d. All of these

18. Temperature in pasteurization is a. 62.8o C b. 35.7o C c. 68.2oC d. 60.8o C

19. The bacterial culture prepared by pure culture method is a. Inoculum b. Suspension c. Dilution d. None of these

20. Algae are rich in a. Carbohydrates b. Proteins c. Vitamins d. All of these

21. L-Lysine is produced from a. Corynebacterium glutamicum b. Clostridium botulinum c. Mycobacterium sps d. Pseudomonas

22. The orderly increase in the quantity of all of the cellular components is known as a. Reproduction b. Growth c. Binary fission d. None of these

23. Theobacillus thio oxidans grow at pH a. 7.0 b. 1.0 c. 6.0 d. 9.5 24. Slow freezing requires the conditions a. 0o C to 15o C for 15 min. b. – 6 o C to – 10o C for 10 min. c. – 15o C to 3 to 72 hrs. d. None of these

25. Discontinuous heating is called a. Pasteurization b. Sterilization c. Fermentation d. Tindalisation
26. Isolation is a. Purification of culture b. Introduction of inoculum c. Separation of a single colony d. To grow microorganisms on surfaces

27. The condition required for autoclave a. 121o C temp.and 15 lbs. pressure for 20 min. b. 120o C temp.and 20 lbs. pressure for 30 min c. 150o C temp.for 1 hr. d. 130o C temp for 2 hr.

28. Lysozyme is effective against a. Gram negative bacteria b. Gram positive bacteria c. Protozoa d. Helminthes

29. Blood agar medium is a. Enrichment medium b. Enriched medium c. Selective medium d. Differential medium

30. Infrared radiation is a method of sterilization by a. Dry heat b. Moist heat c. Chemical method d. Mechanical method STERILISATION, CULTURE MEDIA & PURE CULTURE TECHNIQUES

31. Lyophilization means a. Sterilization b. Freeze-drying c. Burning to ashes d. Exposure to formation

32. Temperature used for hot air oven is a. 100o C for 1 hour b. 120o C for 1 hour c. 160o C for 1 hour d. 60oC for 1 hour

33. Phenol co-efficient indicates a. Efficiency of a disinfectant b. Dilution of a disinfectant c. Purity of a disinfectant d. Quantity of a disinfectant

34. This is an agar plate method and is commonly used for estimation of the number of bacteria in milk. a. Standard Plate Count (SPC) b. Spread plate c. Lawn culture d. Roll tube method

35. Agar is obtained form a. Brown algae b. Red algae c. Green algae d. Blue-green algae

36. A gram positive organism which produces swarming on culture medium is a. Salmonella b. Clostridium c. Staphylococci d. Proteus

37. Enhancement of virulence in bacteria is known as a. Pathogenicity b. Attenuation c. Exaltation d. Toxigenicity

38. For effective sterilization in an autoclave the temperature obtained is a. 50o C b. 100o C c. 120oC d. 180o C

39. Spores are killed by a. 70% alcohol b. Glutaraldehyde c. Autoclaving d. Both b and c

40. Glassware are sterilized by a. Autoclaving b. Hot air over c. Incineration d. None of these

41. Tyndallisation was proposed by a. Tyndall b. Pasteur c. Koch d. Jenner

42. Viruses can be cultivated in a. Lab media b. Broth c. Living cells d. None of these

43. By pasteurization a. All the microorganisms can be removed b. Only pathogenic forms can be removed c. Only non-pathogenic forms can be removed d. All of these are correct

44. The temperature required for pasteurization is a. Above 100oC b. Below 100oC c. 100oC d. None of these

45. In the medium other than nutrients, if any substance is used in excess, that medium is a. Enriched medium b. Special medium c. Enrichment medium d. None of these

46. Example for indicator medium is a. Nutrient Agar b. Nutrient broth c. Wilson and Blair d. Czapeck-dox medium

47. Example of Anaerobic medium is a. Robertson cooked-meat medium b. Nutrient agar c. Nutrient broth d. Mac-Conkey’s agar

48. The differentiate lactose and non-lactose fermentors, the medium used is a. Wilson & lair b. Blood Agar c. Tetra thionate broth d. Mac-Conkey's Agar MCQs IN MICROBIOLOGY

49. Best method for getting pure culture is a. Streak-plate b. Agar slant c. Both a & b d. None of these

50. To transfer cultures from one place to another, the device used is a. Slant b. Needle c. Inoculation loop d. Autoclave

51. The bacterial culture prepared by pure culture is a. Inoculum b. Suspension c. Dilution d. None of these

52. Separation of a single colony is a. Pure-culturing b. Isolation c. Separation d. Both a and b

53. Growth period of the culture is a. Inoculation b. Incubation c. Incineration d. Isolation

54. At the temperature 160oC for one hour, complete sterilization occurs in a. Autoclave b. Hot air oven c. Laminar flow d. Incubator

55. In autoclave, the principle involved is a. Dry heat b. Moist heat c. Steam under pressur d. Both b and c

56. The spores of th bacteria which can withstand the moist heat effect also a. Bacillus subtilis b. Coxiella burnetti c. Bacillus stearothermophilus d. Pseudomonas

57. Factors on which disinfectivity of a disinfectant depends a. Concentration of the substance b. Time of action c. pH of the medium and temperature suitable for the chemical d. All of the above

58. Aldehydes, which are most powerful disinfectants a. Formaldehyde b. Acetaldehyde c. Glutamal aldehyde d. Both a and c

59. Accridine dyes are more effective against a. Gram positive b. Gram negative c. Mycoplasmas d. Rickttsiae

60. The sterilizing agent is a. Ethelene oxide b. Oxygen c. Nitrogen d. Carbon tetrachloride

61. Salts of heavy metals used as disinfectants are a. Thiomersal b. Phenyl mercury nitrate c. Mercurochrome d. All of these

62. Cultures are prepared by penetrating the inoculation loop with suspension into the medium, they are a. Stock cultures b. Stabcultures c. Sub-cultures d. None of these

63. The principle involved in the streak plate method is a. Separation b. Streaking c. Isolation d. Dilution

64. Culture media for fungi are a. Potato dextrose agar (PDA) b. Sabouraud's agar c. Czapekdox agar d. All of the above

65. Spores of actinomycetes are very sensitive, killed at room temperature of a. 52oC for 30 min. b. 65o C for 30 min. c. 70o C for 30 min. d. 43o C for 30 min.

66. The term that is used for the bacteria which can withstand pasteurization but does not grow at higher temperatures a. Thermophiles b. Extreme thermophiles c. Thermoduric d. Facultative thermophiles STERILISATION, CULTURE MEDIA & PURE CULTURE TECHNIQUES

67. A common laboratory method of cultivating anaerobic micro-organisms is a. Gas pack system b. Brewer jar system c. Pyrogallic acid over the cotton d. None of these

68. Alkaliphiles grow at pH value between a. 1 to 6 b. 6 to 9 c. 1 to 11 d. 7 to 12

69. The micro-organisms grow at high salinity are a. Osmophiles b. Halophiles c. Both a and b d. None of these

70. Non-lactose fermenting colonies seen on Mac Conkey's medium are a. Salmonella typhi b. Escherichia coli c. Klebsiella pneumoniae d. Shigella shigae

71. Wilson and Blair medium is used for isolation of a. Staphylococci b. Salmonella typhosa c. Vibrio cholerae d. Shigella shigae

72. Laboratory diagnosis of enteric fever is based on a. Blood culture b. Urine and stool culture c. Widal test d. All of the above

73. Shigella was first isolated by a. Shiga b. Schmitz c. Sonnei d. Robert Koch

74. Which of the following are gas producing Salmonella? a. S.typhi b. S.enteritidis c. S.cholerasuis d. S.typhimurium

75. Kauffmann white scheme is used to detect a. Salmonella spp. b. Shigella spp. c. E.coli d. None of these

76. On Mac Conkey's medium Esch. Coli forms a. Colorless colonies b. Greenish pigmentation c. Pink coloured colonies d. Medusa head appearance

77. C.diphtheriae requires a. LJ medium b. Mac Conkey's medium c. Potassium tellurite medium d. PDA medium

78. Culture medium for Mycobacterium tuberculosis a. LJ medium b. Mac Conkey's medium c. Wilson blair medium d. None of these

79. Lepra bacillus is best cultured on a. Armadillo's brain b. Foot pad of mice c. Liver of guinea pig d. Any of the above

80. Culture medium for clostridia spp. a. 76 Lower stein Jensen's medium b. Mac Conkey's medium c. Robertson's cooked meat medium d. None of these

81. Clsotridium welchii is positive for a. Elek's gel precipitation test b. Nagler's test c. Weil felix test d. Bacitracin test

82. Nagler's reaction detects a. Coagulase b. Hyaluronidase c. Lecithinase d. None of these

83. Incubation period of Cl. welchii is a. 8-12 hours b. 7-10 hours c. 5-7 hours d. 2-4 hours

84. The average incubation period of tetanus is a. 2-3 days b. 7-10 days c. 14-21 days d. 3-4 weeks MCQs IN MICROBIOLOGY

85. Salt agar is used for a. Streptococcus b. Staphylococcus c. Vibrio d. Shigella

86. Culture medium of Leishmania is a. Sabousand's medium b. NNN medium c. Wilson Blair medium d. Czapek – dox medium

87. A simple asexual spore which develops by budding is known as a. Chlamydospore b. Blastospore c. Arthospore d. Conidia

88. Culture medium used for fungus is a. Sabouraud's medium b. Nutrient agar c. Nutrient broth d. Minimal agar medium

89. For ster i l izat ion of fermentat ion equipment the method followed is a. Radiation b. Chemicals c. Heating d. All of these

90. Listed below are substances which are assayed by organisms mentioned in A to E. Match them correctly: 1. Crystal Violet I.P. A. Pasteurella pestis 2. Ampicillin I.P. B. Bacillus cerus 3. Plaque Vaccine I.P. C. Micrococcus luteus 4. Rifampicin D. Lactobacillus aureus E. Lactobacillus aureus F. Bacillus subtillus

91. Match the following terms with their respective formulations A to E: 1. Lysol A. Higher boiling fractions of the tar acids 2. Black fluids B. Prepared from refined tar acids 3. White fluids C. Solution of cresol with soap 4. Iodophores D. Basic molecules has varying numbers of amino groups E. Iodine combined with complex organic chemicals

92. Match the following tests with their respective applications A to E: 1. Schick test A. Tuberculosis 2. Mantoux test B. Detection of extraneous microorganisms 3. Sterility test C. Diphtheria toxin 4. Potency test D. Detection of infection caused by Rickettsia prowazeki E. Usefulness of immunological products

93. Match the following equipments with their respective methods of sterilization A to E: 1. Glass syringes A. Autoclave 2. Disposable B. Chemical instrument 3. Respiratory parts C. Dry heat 4. Dialysis machine D. g-Radiation E. Chicken pox in children

94. The items listed from A to D can be identified by the tests given below : 1. Coomb's test A. Candida albicans 2. Coagulase test B. Virulent staphylococcus aureus C. Mycobacterium tuberculosis D. Non-agglutinating antibodies

95. D.pneumoniae can be cultivated in a. Glucose broth b. Serum broth c. Agar and blood agar d. Chocolate agar e. All of these

96. D.pneumoniae can be identified by a. Microscopic exam b. Culture of sputum/blood c. Animal inoculation d. All of these e. None of these

97. The diagnosis of tuberculosis is carried out by a. Emulator b. Antiformin method c. Petroff's method d. Concentration method e. All of these17 STERILISATION, CULTURE MEDIA & PURE CULTURE TECHNIQUES

98. The size of the virus can be determined by a. Micrography b. Ultra-centrifugation at high speed c. Ultra-filteration d. All of these

99. Differential staining of bacteria spore is related to a. Albert's staining b. Lugol' s staining c. Moller's staining d. Indian ink preparation

100. Electron microscope studies does not help in identifying the section of bacterial spore a. Core b. Spore cortex c. Capsule d. All of these

101. Wilson and Blair bismuth sulphite medium is used for the growth a. Salmonella typhi b. Shigella dysenteriae c. Vibrio cholerae d. E. coli

102. Which Rickettsia can be grown on blood agar media? a. Lactobacilli b. Streptobacillus c. Bacillus anthrax d. Vibrio cholerae

ANSWERS 1. b 2. b 3. c 4. b 5. d 6. a 7. b 8. a 9. c 10. b 11. a 12. c 13. b 14. c 15. a 16. b 17. c 18. a 19. a 20. d 21. a 22. b 23. b 24. c 25. d 26. c 27. c 28. b 29. b 30. d 31. b 32. c 33. a 34. a 35. b 36. d 37. c 38. c 39. d 40. b 41. a 42. c 43. b 44. b 45. a 46. c 47. a 48. d 49. c 50. b 51. a 52. b 53. b 54. b 55. d 56. c 57. d 58. d 59. a 60. a 61. d 62. b 63. d 64. d 65. b 66. c 67. c 68. d 69. c 70. a 71. b 72. d 73. c 74. b 75. a 76. c 77. c 78. a 79. b 80. c 81. b 82. c 83. a 84. b 85. b 86. b 87. b 88. b 89. d 90. 1.d, 2.c, 3.a, 4.e 91. 1.c, 2.a, 3.b, 4.e 92. 1.c, 2.a, 3.b, 4.e 93. 1.c, 2.d, 3.e, 4.b 94. 1.d, 2.a 95. e 96. e 97. e 98. d 99. c 100. c 101. a 102. a18