MCQS ON BACTERIAL METABOLISM AND CHARACTERISTICS.

1. Which of the given is a characteristic feature of Wolinella?

- A. Helical, curved or straight rods
- B. Motile
- C. Single polar flagella
- D. All of the above
- 2. Which of the given is not a characteristic feature of Wolinella?
 - A. Do not have a fermentative type of metabolism
 - B. Respire anaerobically with H2 or formate as an electron donor
 - C. Respire anaerobically with fumarate or nitrate as an electron acceptor
 - D. Formate is oxidized to succinate

3.In anaerobic respiration in wolinella formate is oxidized to

- <mark>A. CO2</mark>
- B. COOH
- С. СНЗСООН
- D. All of the above
- 4. In anaerobic respiration in wolinella fumarate is reduced to
 - A. Succinate
 - B. Formate
 - C. Acetate

- D. None of the above
- 5. Which of the given is a characteristic of selenomonas?
 - A. Cresent shaped cells
 - B. Motile by tuft of flagella located at the middle of the concave side.
 - C. Acetate propionate and sometimes lactate is an end product of fermentation
 - D. All of the above
- 6. Which of the given is a major end product of fermentation in selenomonas?
 - A. Acetate
 - B. Propionate
 - C. Nitrate
 - D. Both A and B
- 7. Which of the given is a major end product of fermentation in Anaerovibrio?
 - A. Propionate
 - B. Acetate
 - C. Both A and B
 - D. None of the above
- 8. Anaerovibrio have..... characteristics feature.
 - A. Slightly curved rods
 - B. Motile
 - C. Single polar flagella
 - D. All of the above
- 9. Which of the given is not a characteristic of sulfur reducing bacteria?
 - A. Anaerobic bacteria
 - B. Use inorganic sulfur compound as electron donor

C. Occur in mud, marine and brackish environment

D. Forms large amount of H2S

10. Genus..... can respire with elemental sulfur as the electron acceptor.

- A. Desulfuromonas
- B. Sulfonamide
- C. Megasphaera
- D. None of the above

11. Genera other than desulfuromonas cannot use sulfur but can use

- A. Sulfate
- B. Thiosulfate
- C. Both A and B
- D. None of the above
- 12. Disulfovibrio is a
 - A. Vibrioid
 - B. Helical
 - C. Linear
 - D. Both A and B
- 13. Desulfococcus is a.....
 - A. Spherical
 - B. Vibrioid
 - C. Helical
 - D. Linear

14. Which of the given is not a characteristic feature of family Veillonellaceae?

<mark>A. Motile cocci</mark>

- B. Typically occur in pairs
- C. Contains three genera
- D. Inhabitant of oral cavity, respiratory tract, or intestinal tract of human

15. Family Veillonellaceae placed into given three genera except,

- A. Veillonella
- B. Ehrlichieae
- C. Acidaminococcus
- D. Megsphaera

16. Which of the given is not the characteristics feature of the chlamydias?

- A. Non motile
- B. Gram positive
- C. Obligate parasite
- D. Tiny bacteria
- 17. Which of the given is not the characteristics feature of the Rickettsias?
 - A. Non motile
 - B. Gram negative
 - C. Harmless bacteria
 - D. Tiny bacteria
- 18. Family Rickettsiaceae is subdivided into three tribes except,
 - A. Megsphaera
 - B. Rickettsieae
 - C. Ehrlichieae
 - D. Wolbachieae

- 19. Which of the given tribe infect arthropods only?
 - A. Megsphaera
 - B. Rickettsieae
 - c. Ehrlichieae
 - D. Wolbachieae

20. Which of the following characteristic feature does not belong to rickettsia?

- A. Transmission to humans occur via an arthropod vector
- B. Cultured in guinea pigs, mice, eggs
- C. Organism multiply in cytoplasm and sometimes in nucleus.
- D. None of the above
- 21. Which of the given disease is caused by Rickettsia species?
 - A. Rockey mountain spotted fever
 - B. Classical typhus fever
 - C. Murin typhus fever
 - D. All of the above

22. Which of the given disease is caused by Rickettsia species?

- A. Rickettsilpox
- B. Scrub typhus
- C. Both A and B
- D. None of the above

23. Which of the given is the characteristic feature of Rochalimaea?

- A. Mainly parasite of human
- B. Can be cultivated in blood agar
- C. Grow epicellularly
- D. All of the above

24. Rochalimaea causes a louseborne disease, trench fever in humans.

- A. Quintana
- B. Burnetii
- C. Bartonella
- D. None of the above

25. Rochalimaea quintana causes a, trench fever in humans.

- A. Wilt
- B. Necrosis
- C. louseborne disease
- D. None of the above

26. Rochalimaea quintana causes a louseborne disease, in humans.

- A. trench fever
- B. Malignancy
- C. Hepatocellular carcinoma
- D. None of the above

27. Which of the given is not the characteristics of Coxiella?

- A. Growth occurs within membrane bound vacuole of host cell
- B. Sensitive to heat
- C. Presence of endospore like structure
- D. Transmission of vertebrates occur via an arthropod vector.

28. Coxiella have unusually high resistance to heat probably due to occurance of like structure in the cell.

A. Cyst

B. Endospore

C. Cell Junction

D. Plasmodesmata

29. Coxiella is the causative agent of Q fever, a type of pneumonia.

- A. Bartonella
- <mark>B. Burnetti</mark>
- C. Quintana
- D. None of the above

30. Coxiella burnetti is the causative agent of a type of pneumonia.

- A. Malignancy
- B. Malignant tumor
- C. Tertian tumor
- D. Q fever

31. Coxiella burnetti is the causative agent of Q fever a type of

- A. Pneumonia
- B. Malignancy
- C. Tertian tumor
- D. Carcinoma

32. Which of the following is not the characteristic feature of Bartonellaceae?

- A. Family consists of symbionts of the RBCs of human
- B. Organism can be cultivated in nonliving laboratory media
- C. Geneus Bartonella cause Oroya fever
- D. None of the above

33. The genus Bartonella cause fever in humans and is transmitted by biting flies that occur along the western slope of Andes mountains in south America.

A. Tertian

- B. Q
- C. Oroya
- D. Malignant

34. The genuscause Oroya fever in humans and is transmitted by biting flies that occur along the western slope of Andes mountains in south America.

- A. Bartonella
- B. Pseudomonas
- C. Streptococcus
- D. Staphylococcus

35. The genus Bartonella cause Oroya fever in and is transmitted by biting flies that occur along the western slope of Andes mountains in south America.

- A. Animals
- B. Humans
- C. Plants
- D. None of the above

36. Organisms from family Anaplasmataceae grows within or onor occur free in plasma of various wild and domestic animals.

- A. Cerebrospinal fluid
- B. Erythrocytes
- C. WBC
- D. None of the above

37. Organisms from familygrows within or on erythrocytes or occur free in plasma of various wild and domestic animals.

A. Anaplasmataceae

- B. Chlamydiales
- C. Mycoplasmas
- D. None of the above

38. Organisms from family Anaplasmataceae grows within or on erythrocytes or occur free in of various wild and domestic animals.

- A. Cerebrospinal fluid
- <mark>B. Plasma</mark>
- C. WBC
- D. None of the above
- 39. Clamydias are intracellular.....
 - A. Symbionts
 - B. Commensals
 - C. Parasites
 - D. Ammensals

40. Which of the given is not the characteristics of chlamydiales?

- A. Ability to make ATP on host cell
- B. Termed as energy parasite
- C. Cultivated in the yolk sac membrane of embryonated chicken egg
- D. Cultivated in tissue culture of mammalian cell such as McCoy and HeLa cells

41. Some strains of Chlamydiacause a type of keratoconjunctivitis, trachoma that often results in blindness.

- A. Trachomatis
- B. Psittaci
- C. Flagellatum
- D. None of the above

42. Some strains of Chlamydia trachomatis cause a type of, trachoma that often results in blindness.

A. Keratoconjunctivitis

- B. Glomerulonephritis
- C. Carditis
- D. None of the above

43. Some strains of Chlamydia trachomatis cause a type of keratoconjunctivitis trachoma that often results in

- A. Scurvy
- B. Blindness
- C. Bronchitis
- D. None of the above

44. Some strain of chlamydia cause..... which is the most prevalent sexually transmitted disease.

A. Nongonococcal urethritis

- B. Glomerulonephritis
- C. Carditis
- D. None of the above

45. Some strain of chlamydia cause nongonococcal urethritis which is the most prevalent transmitted disease.

- A. Asexually
- B. Sexually
- C. Occupationally
- D. Contaminated food and water

46.Some strain of chlamydia cause sexually transmitted disease

A. Lymphogranuloma venerum

- B. Glomerulonephritis
- C. Carditis
- D. None of the above

47. Chlamydia is a mainly a pathogen of birds and domestic and wild mammals but can also cause psittacosis in humans.

A. <mark>Psittaci</mark>

- B. Trachomatis
- C. Cerevisiae
- D. None of the above

48. Chlamydia psittaci is a mainly a pathogen of birds and domestic and wild mammals but can also cause in humans.

A. Psittacosis

- B. Glomerulonephritis
- C. Carditis
- D. None of the above

49. are distinguished by their lack of cell wall.

A. Mycoplasmas

- B. Rickettsia
- C. Chlamydias
- D. None of the above

50. Mycoplasmas are distinguished by their lack of

<mark>A. Cell wall</mark>

- B. Cell membrane
- C. Mitochondria
- D. Nucleus

51. Outer membrane of mycoplasma is the......

- A. Cell wall
- B. Cell membrane

- c. Mitochondria
- D. Nucleus

52. Which of the given is not the characteristic feature of mycoplasma?

- A. Lack cell wall
- B. Shape ranges from sphere to filament
- C. Have a character of plasticity
- D. Resistant to lysis by osmotic shock

53. Mycoplasma cells have and can assume many different shapes ranging from spheres to branched filament.

- A. Plasticity
- B. Genocity
- C. Mycolic acid scarcity
- D. None of the above
- 54. Mycoplasmas can be inhibited by antibiotics that affect
 - A. Nucleic acid synthesis
 - B. Protein synthesis
 - C. Cell wall synthesis
 - D. None of the above
- 55. Which of the given antibiotic is not effective against mycoplasmas?
 - A. Tetracycline
 - B. Chloramphenicol
 - C. Penicillin
 - D. All of the above

56. Which of the given antibiotic is effective against mycoplasmas?

- A. Tetracycline
- B. Chloramphenicol
- c. Penicillin
- D. Both A and B

57. Colonies of mycoplasma shown..... appearance on non-living media.

A. Fried egg

- B. Capsule
- C. Wrinkled
- D. Elevated and wrinkled

58. Which of the given is not the characteristics of L phase variant bacteria?

- A. Osmotically fragile
- B. Cell wall present
- C. May occur spontaneously due to continues exposure to sublethal levels of penicillin
- D. Form fried egg colonies

59. L phase variants are derived from bacteria and can usually revert to the normal...... bacteria form.

- A. Membrane, membrane respectively
- B. Wall, Wall respectively
- C. Membrane, wall respectively
- D. Wall, membrane respectively

60. At present mycoplasmas are placed in the taxonomic class

- A. Mollicutes
- B. Spirocutes
- C. Mycocutes
- D. Cryptocutes

61. At present are placed in the taxonomic class Mollicutes.

- A. <mark>Mycoplasmas</mark>
- B. Spirochetes
- C. Eukaryotes
- D. None of the above

62. Mycoplasmas are of the mucous membrane and joints of humans or animals and require cholesterol for growth.

- A. Symbionts
- B. Ammensal
- C. Parasite
- D. Commensal

63. Mycoplasmas are parasite of the of humans or animals and require cholesterol for growth.

- A. mucous membrane and joints
- B. Kidney and glomerular filtrate
- C. Amygdala and cerebellum
- D. None of the above

64. Mycoplasmas are parasite of the mucous membrane and joints of and require cholesterol for growth.

- A. Humans or animals
- B. Aves
- C. Reptiles
- D. Amphibians

65. Mycoplasmas which comes under family myccoplasmataceae are parasite of the mucous membrane and joints of humans or animals and require...... for growth.

A. Cholesterol

- B. Plasma
- C. Erythrocytes
- D. None of the above

66. Mycobacterium...... is a causative agent of primary atypical pneumonia.

- A. Uroplasma
- B. Acholeplasma
- C. Spiroplasma
- D. Pneumoniae

67. Mycobacterium pneumoniae is a causative agent of primary atypical

- A. Pneumonia
- B. Tuberculosis
- C. Cholera
- D. Malaria

68. Members of genus require urea for growth and cause urethritis in humans.

- A. Uroplasma
- B. Acholeplasma
- c. Spiroplasma
- D. Pneumoniae

69. Members of genus uroplasma requirefor growth and cause urethritis in humans.

- A. <mark>Urea</mark>
- B. Ammonia
- C. Urica
- D. None of the above

70. Members of genus uroplasma require urea for growth and cause in humans.

A. Urethritis

- B. Pneumonia
- C. Urogenital disease
- D. None of the above

71. Members of genus uroplasma require urea for growth and cause in cattle.

- A. Urethritis
- B. Pneumonia
- c. Urogenital disease
- D. None of the above

72. Members of genus uroplasma require urea for growth and cause in animal species.

- A. Urethritis
- B. Pneumonia
- C. Urogenital disease
- D. None of the above

73. Mycoplasmas which comes under familyare parasite of the mucous membrane and joints of humans or animals and require cholesterol for growth.

- A. Mycoplasmataceae
- B. Acholeplasmataceae
- C. Spiroplasmataceae
- D. None of the above

74. Members of the family do not require cholesterol for growth.

- A. Mycoplasmataceae
- B. Acholeplasmataceae

- c. Spiroplasmataceae
- D. None of the above

75. Members of family are helical and exhibit swimming motility.

- A. Mycoplasmataceae
- B. Acholeplasmataceae
- c. Spiroplasmataceae
- D. None of the above

76. Members of family Spiroplasmataceae are and exhibit swimming motility.

- A. Rod shaped
- B. Helical
- C. Circular
- D. Comma shaped

77. Members of family Spiroplasmataceae are helical and exhibit

A. Swimming motility

- B. Cell wall
- C. Flagellated movement
- D. None of the above

78. Which of the given is not the characteristics of family Spiroplasmataceae?

- A. Helical
- B. Lack cell wall
- C. Flagellated motility
- D. Contain single genus spiroplasma

79. Members of spiroplasmataceae are pathogenic to

- A. Plants
- B. Animals
- C. Birds
- D. Reptiles

80. is a great variety of bacteria like forms have been observed within the cells of protozoa, insects, fungi, sponges, coelenterates, helminths and annelids.

- A. Endosymbionts
- B. Mycoplasmataceae
- c. Acholeplasmataceae
- D. None of the above

81. Endosymbionts have been observed within.....

- A. Helminths
- B. Fungi
- C. Protozoa
- D. All of the above

82..... is an endosymbiont carried by certain strains of protozoan Paramecium tetraurelia.

A. Lyticum flagellatum

- B. Saccharomyces cerevisiae
- C. Candida albicans
- D. None of the above

83. Lyticum flagellatum an endosymbiont carried by certain strains of protozoan......

A. Paramecium tetraurelia

- B. Saccharomyces cerevisiae
- C. Candida albicans
- D. None of the above

84. Lyticum flagellatum an carried by certain strains of protozoan Paramecium tetraurelia

- A. Spite
- B. Parasite
- C. Endosymbiont
- D. None of the above

85. Lyticum flagellatum synthesize the vitamin in the host.

- A. Cyanocobalamin
- B. Biotin
- C. Folic acid
- D. Thiamin

86. The endosymbiont synthesize the vitamin folic acid in the host.

- A. Lyticum flagellatum
- B. Saccharomyces cerevisiae
- C. Candida albicans
- D. None of the above

87. The endosymbiont produces a that is liberated into the culture media.

- A. Vitamins
- B. Minerals
- C. Toxins
- D. Amino acids

88. When an endosymbiont bearing strain of is mixed with certain strain lacking it, the latter protozoa are rapidly killed and lysed

A. P. tetraurelia

B. Saccharomyces cerevisiae

- C. Candida albicans
- D. None of the above

89. When an endosymbiont bearing strain of P. tetraurelia is mixed with certain strain lacking it, the latter protozoa are

- A. rapidly killed and lysed
- B. Metabolized
- C. Grown
- D. None of the above

90. An endosymbiont bearing stain P. tetraurelia is called a..... strain.

- A. Sensitive
- B. Killer
- C. Lysogenic
- D. None of the above

91. The strains who lack endosymbionts calledstrain.

- A. Sensitive
- B. Killer
- c. Lysogenic
- D. None of the above

92. Endosymbiont bearing strain are resistant to the......

- A. Metabolites
- B. Toxins
- C. Growth hormones
- D. Vaccines

93. Which of the given is not the characteristic feature of Gram-positive cocci?

A. Do not possess cytochrome

- B. Able to respire with oxygen
- C. Oxidative type of metabolism
- D. Obtain energy under anaerobic condition by fermentation

94. Which of the given is the characteristics feature of Nocardioforms?

- A. Hyphae fragment into rod shaped or coccoid shaped mycelium
- B. Aerobic organism tend to form substrate mycelium
- C. Conidiospores may develop from aerial hyphae
- D. All of the above

95.Mycobacteria are......

- A. Acid fast
- B. Nonacid fast
- C. Non fastidious
- D. None of the above

96. Which of the given is not the characteristic feature of mycobacteria?

A. Non acid fast

- B. Aerobic
- C. Slightly curved or straight rods
- D. None of the above

97. Which of the given is not the characteristic feature of nonspore forming gram positive rods of irregular shape?

- A. Cell may exhibit swelling
- B. Y or V shaped rod/coccus cycle
- C. Non filamentous in complete growth cycle
- D. None of the above

98. Which of the given is not the characteristic feature of nonspore forming gram positive rods of regular shape?

- A. Cells have uniform appearance with swelling
- B. Branching or other type of variation
- C. Some occur in characteristic trichome
- D. None of the above

99. Which of the given is not the characteristic feature of Endospore forming gram positive bacteria?

- A. Anaerobes live by fermentation
- B. All are aerobic
- C. Mainly rod shaped but some are cocci
- D. Some respire anaerobically with sulfate

100. Which of the given organism stain acid fast?

- A. Gram positive cocci
- B. Mycobacteria
- C. Nocardioforms
- D. Nonspore forming gram positive rods of irregular forms

101 Which of the given is not the characteristics of members of family Deinococcaceae?

- A. Cocci occurs mainly in octads or cubical packets
- B. Organism have an unusually high resistance to gamma and UV radiations
- C. Organism can be isolated as spoilage agent from foods
- D. None of the above

102. In family Deinococcaceae genus deinococcus which forms colonies?

- A. Blue
- B. Yellow

- C. Green
- D. Red

103. The radiation resistance of the genus deinococcous is reflated by the name of one of the species

A. D. radiodurance

- B. D. radiococci
- C. D.radibacillus
- D. D. radioflagellate

104. Wich of the given is the characteristic of family microccocaceae?

- A. Cocci occurs mainly in clusture, tetrads or cubical packets of eight cells
- B. Cells do not exhibit unusual high resistance to gamma and UV radiations
- C. Both A and B
- D. None of the above

105. Mich of the given is not the characteristics of micrococcus?

- A. Nonmotile cocci
- B. Aerobic
- C. Oxidative
- D. Catalase negative

106. Colonies of micrococcus may be

- A. Red
- B. Yellow
- C. Non pigmented
- D. All of the above

107. Micrococci are harmless..... occurring in soil and freshwater but they can also be found on the skin of humans and animals.

- A. Parasite
- B. Spite
- C. Saprophyte
- D. Halophiles

108.are harmless saprophyte occurring in soil and freshwater but they can also be found on the skin of humans and animals.

- A. Micrococci
- B. Mycobacterium
- C. Mycoplasma
- D. Gonorrhea

109. Which of the given is not the characteristics of Planococcus?

- A. Aerobic
- B. Oxidative
- C. Catalase positive
- D. Non motile

110. Planococcus are motile and possess flagella.

- <mark>A. 1 to 3</mark>
- B. 3 to 6
- C. 6 to 9
- D. 9 to 12

111. Planococcus shows...... colored colonies.

A. Yellow-brown

- B. Pink-Red
- C. Orange Yellow
- D. Green golden yellow

112. Planococci are harmless..... that occur in marine environment.

- A. Parasite
- B. Spite
- C. Saprophyte
- D. Commensal

113..... are harmless saprophyte that occur in marine environment.

- A. Mycobacterium
- B. Planococcus
- C. Mycoplasma
- D. Gonorrhea

114. Planococcus are harmless saprophyte that occurs in

A. Marine environment

- B. Sweet water
- C. Forest
- D. None of the above

115. Which of the given is not the characteristic feature of Staphylococcus?

- A. Non motile cocci
- B. Catalase positive
- C. Facultative aerobe
- D. Oxidase and fermentative type of metabolism

116. Staphylococci areand occur on skin and mucous membranes of humans and warm-blooded animals.

- A. Parasitic
- B. Spite
- C. Saprophyte
- D. Commensal

117.are parasite and occur on skin and mucous membranes of humans and warm-blooded animals.

- A. Staphylococci
- B. Mycoplasma
- c. Gonorrhea
- D. Mycobacterium

118. Pathogenic species Staphylococcus can cause boils, abscesses, wound infections, post operative infections, toxic shock syndrome, and food poisoning in humans.

A. <mark>Aureus</mark>

- B. Saprophyticus
- C. Epidermis
- D. Vaginalis

119. Pathogenic species Staphylococcus aureus can cause......

- A. Wound infection
- B. Boils
- C. Abscesses
- D. All of the above

120. Pathogenic species Staphylococcus aureus can cause.....in animals.

- A. Mastitis
- B. Boils
- C. Bumps
- D. TB

121. Staphylococcus aureus produces colored colonies on nutrient agar.

A. Creamy white

- B. Green pigmented
- C. Golden yellow
- D. Pink to red

122.aureus produces golden yellow colonies on nutrient agar.

A. Staphylococcus aureus

- B. Pseudomonas aeruginosa
- C. Penicillium notatum
- D. None of the above

123. Staphylococcus aureus is positive for

- A. Coagulase
- B. Catalase

C. Both A and B

D. None of the above

124. Staphylococcus is coagulase negative.

- A. Epidermis
- B. Saprophyticus
- C. Aureus
- D. Both A and B

125. Staphylococcus epidermis and staphylococcus saprophyticus can cause

- A. Wound infection
- B. Endocarditis
- C. Urinary tract infection
- D. All of the above

126. Which of the given is not the characteristics of Aerotolerant facultative cocci?

A. Possess cytochrome

- B. Do not respire
- C. Fermentative type of metabolism
- D. Can grow aerobically or anaerobically

127. Which of the given is not the characteristic of streptococcus?

- A. Cells are arranged in pairs or chain
- B. Catalase Positive
- C. Homofermentative organism
- D. All of the above

128. Streptococcus organism is homofermentative and predominant end product of sugar fermentation is

- A. Acetic acid
- B. Lactic acid
- C. Gluconic acid
- D. Propionic acid

129 Streptococcus organism isand predominant end product of sugar fermentation is lactic acid

A. Homofermentative

- B. Heterofermentative
- C. Secondary heterofermentative
- D. None of the above

130. Which of the given is the characteristic feature of streptococcus?

A. Gram positive

- B. Catalase positive
- C. Heterofermentative organism
- D. Predominant end product of sugar fermentation is acetic acid

131. Which of the given is the characteristic feature of Streptococcus?

- A. Complex nutritional requirement
- B. Usually, aerotolerant
- C. Some strains can tolerate low level of oxygen
- D. All of the above

132.Some streptococci are beta hemolytic on

- A. Skim milk agar
- B. Potato dextrose agar
- C. Blood agar
- D. Muller Hinton agar

133. Some streptococci are on blood agar: the colonies are surrounded by clear, colorless or greenish zone of partially lysed erythrocytes.

A. Beta hemolytic

- B. Colored
- C. Colorless
- D. None of the above

134. Some streptococci are beta hemolytic on blood agar: the colonies are surrounded by of partially lysed erythrocytes.

- A. Clear
- B. Colorless
- C. Greenish zone
- D. All of the above

135. Some streptococci are Beta hemolytic on blood agar: the colonies are surrounded by clear, colorless or greenish zone of partially lysed

A. Erythrocytes

- B. WBC
- C. Plasma
- D. None of the above

136. Most of the streptococci are of humans and animals

- A. Parasitic
- B. Pathogenic
- C. Saprophytic
- D. Both A and B

137. Streptococcus pyogenes causes

- A. Sore throat
- B. Scarlet fever
- C. Erysipelas
- D. All of the above

138. Streptococcus pyogenes causes

- A. Rheumatic fever
- B. Human infection
- C. Acute glomerulonephritis
- D. All of the above

139. Streptococcus inhabits the human oral cavity and is a major causative agent of dental caries.

- A. Aureus
- B. Pyrogens
- C. Mutans
- D. Faecalis

140. Streptococcus mutans inhabits the human and is a major causative agent of dental caries.

- A. Mucous layer
- B. Cerebrospinal fluid
- C. Oral cavity
- D. None of the above

141. Streptococcus occurs normally in the intestinal tract of humans and animals and is therefore called an enterococcus.

- A. Aureus
- B. Pyrogens
- c. Mutans
- D. Faecalis

142. Streptococcus faecalis occurs normally in the of humans and animals and is therefore called an enterococcus.

A. Intestinal tract

- B. Brain
- C. Erythrocytes
- D. WBC

143. Streptococcus faecalis occurs normally in the intestinal tract of humans and animals and is therefore called an

- A. Enterococcus
- B. Mycoplasma
- C. Micrococcus
- D. None of the above

144. Streptococcus faecalis can be an opportunistic pathogen, causing

A. Urinary tract infection

- B. Endocarditis
- C. Both A and B
- D. None of the above

145. Streptococcus are harmless contaminants of milk and dairy products

- A. Lactis
- B. Cremoris
- C. Faecalis
- D. Both A and B

146. Streptococcus cause rapid curdling and souring of milk

- A. Lactis
- B. Cremoris
- C. Faecalis
- D. Both A and B

147. Streptococcus used as a starter culture in manufacturing buttermilk and cheeses.

- A. Lactis
- B. Cremoris
- C. Faecalis
- D. Both A and B

148. Streptococcus is colloquially called the pneumococcus and has a great significance causing nearly 70 percent of all cases of lobar pneumonia in humans.

- A. Pneumoniae
- B. Lactis
- C. Cremoris
- D. Faecalis

149. Streptococcus pneumoniae is colloquially called the and has a great significance causing nearly 70 percent of all cases of lobar pneumonia in humans.

- <mark>A. Pneumococcus</mark>
- B. Micrococcus
- C. Staphylococcus
- D. None of the above

150. Streptococcus pneumoniae is colloquially called the pneumococcus and has a great significance causing nearly 70 percent of all cases of lobarin humans.

- A. Pneumonia
- B. Blood clotting
- C. Respiratory disease
- D. None of the above

151. Which of the given is not the characteristic feature of Leuconostoc?

- A. Cocci are arranged in pairs or chain
- B. Catalase Positive
- C. Heterofermentative
- D. Form CO2 and ethanol

152. Which of the given is the characteristic feature of Leuconostoc?

- A. Catalase positive
- B. Bacilli are in clusture
- C. Heterofermentative
- D. Do not form ethanol

153.Leuconostoc forms......

- A. CO2
- B. Ethanol
- C. Lactic acid

D. All of the above

154. Leuconostoc are harmless and are isolated from diverse sources such as grass, silage, grape leaves sauerkraut and spoiled food

- A. Parasite
- B. Spite
- C. Saprophyte
- D. Commensal

155. are used in starter culture for manufacture of butter, buttermilk, and cheese because of their formation of the flavor compound diacetyl from citrate.

- A. Leuconostoc
- B. Pneumococci
- C. Micrococci
- D.

Staphylococcus

156. Leuconostoc are used in starter culture for manufacture of butter, buttermilk, and cheese because of their formation of the flavor compoundfrom citrate.

- A. Diacetyl
- B. Acetic acid
- C. Propanol
- D. None of the above

157. Leuconostoc are used in starter culture for manufacture of butter, buttermilk, and cheese because of their formation of the flavor compound diacetyl from

- A. <mark>Citrate</mark>
- B. Acetate
- C. Butyrate
- D. Propionate

158. Which of the given is not the characteristic feature of Pediococcus?

- A. Cocci occurs in pairs and tetrads
- B. Catalase positive
- C. Homolactic type of fermentation
- D. Optically inactive lactic acid

159. Pediococci are saprophytes and are particularly noted for their ability to form material that causes beer to become ropy and viscous.

- A. Antigenic
- B. Capsular
- C. Matrix
- D. None of the above

160. Pediococci are.....and are particularly noted for their ability to form capsular material that causes beer to become ropy and viscous.

- A. Parasitic
- B. Saprophytic
- C. Spite
- D. None of the above

161.are saprophytic and are particularly noted for their ability to form capsular material that causes beer to become ropy and viscous.

- A. Pediococci
- B. Staphylococci
- C. Streptococci
- D. None of the above

162.Pediococci are saprophytic and are particularly noted for their ability to form capsular material that causes beer to become

A. Ropy and viscous

- B. Thinner
- C. Aromatic
- D. None of the above

163. Which of the given is not the characteristic feature of Anaerobic gram-positive cocci?

- A. Fermentative type of metabolism
- B. Most genera form CO2, H2, short chain fatty acid
- C. Oxidative type of metabolism
- D. Some genera must be supplied with a fermentable sugar

164. Anaerobic gram-positive cocci form

- A. CO2
- B. H2
- C. Short chain fatty acid
- D. All of the above

165. Anaerobic gram-positive cocci form......

- A. Succinic acid
- B. Ethanol
- C. Short chain fatty acid
- D. All of the above

166. Which of the given is the characteristics feature of peptococcus?

- A. In pairs, clusture, tetrads and short or long chain
- B. Peptone or amino acid as an energy source
- C. Occur in human intestine and respiratory tract
- D. All of the above
167. Which of the given is the characteristics feature of peptostreptococcus?

- A. Clusture of rods
- B. Carbohydrate as a main energy source
- C. Occur in clinical specimen
- D. Amino acid and protein as a main energy source

168. Which of the given is the characteristics feature of Ruminococcus?

- A. Clusture of rods
- B. Amino acid and protein as a main energy source
- C. Carbohydrate as a main energy source
- D. Do not Occur in bovine and ovine rumen

169. Which of the given is not the characteristics feature of Coprococcus?

- A. Pair and short or long chains
- B. Occur in human feces
- c. Carbohydrate as a main energy source
- D. Occur in bovine and ovine rumen

170. Which of the given is not the characteristic feature of Sarcina?

- A. Cubical packets of eight cells
- B. Carbohydrate as an energy source
- C. Gram negative
- D. Occur in soil, grain, mud, diseased human stomach

171. Which of the given is not the characteristics of endospore forming gram forming gram positive bacteria?

- A. Endospore forming bacteria
- B. Rod shaped but some are cocci
- C. Major strains are gram positive but some are gram negative

D. Non motile

172. Which of the given is the characteristics of spore forming rods and cocci?

- A. Rod shaped bacteria
- B. Harmless saprophyte occurring in soil
- C. Form exocellular enzyme
- D. All of the above

173. Many spore forming rods and cocci form exocellular enzyme that protein or complex polysaccharide and cause food spoilage.

- A. Activate
- B. Hydrolyze
- C. Anabolite
- D. None of the above

174. Many spore forming rods and cocci form exocellular enzyme that Hydrolyze and cause food spoilage.

- A. Protein
- B. Complex polysaccharide
- C. Enzymes
- D. Both A and B

175. species may survive milk pasteurization or inadequate heat treatment during canning of foods.

A. Bacillus

- B. E. coli
- C. Staphylococci
- D. Streptococci

176. Bacillus is a common mesophilic saprophyte and widely distributed in nature.

- A. Subtilis
- B. Cereus
- C. Both A and B
- D. None of the above

177. Bacillus subtilis and Bacillus cereus produce exoenzyme that hydrolyze......

- A. Strach
- B. Casein
- C. Peptidoglycan
- D. Both A and B

178. produce exoenzyme that hydrolyze starch and casein.

- A. Bacillus subtilis
- B. Bacillus cereus
- C. Both A and B
- D. None of the above

179. Bacilluscan cause a type of food poisoning.

- A. Cereus
- B. Stereothermophilus
- C. Subtilis
- D. None of the above

180. Bacillus cereus can cause a type of

- A. Respiratory tract infection
- B. Kidney failure
- C. Food infection
- D. Cirrhosis

181.Bacillus is a thermophilic species.

- A. Cereus
- B. Stereothermophilus
- c. Subtilis
- D. Licheniformis

182. The minimum growth temperature of bacillus stereothermophilus is......degree Celsius.

- <mark>A. 30 to 45</mark>
- B. 10 to 15
- C. 15 to 20
- D. None of the above

183. The maximum growth temperature of Bacillus stereothermophilus is degree Celsius.

<mark>A. 65 to 75</mark> B. 55 to 65

- C. 45 to 55
- D. 35 to 45

184. The of Bacillus stereothermophilus species are highly resistant to heat and therefore this species is one of those associated with spoilage of canned goods.

- A. Capsule
- B. Endospore
- C. Flagella
- D. Pseudopodia

185. The endospore of Bacillus stereothermophilus species are highly resistant to and therefore this species is one of those associated with spoilage of canned goods.

A. Heat

- B. Moisture
- C. Water
- D. None of the above

186. The endospore of Bacillusspecies are highly resistant to heat and therefore this species is one of those associated with spoilage of canned goods.

- A. Stereothermophilus
- B. Licheniformis
- C. Cereus
- D. None of the above

187. Bacillus polymyxa has the ability to form during sugar fermentation.

- A. Gas
- B. Lactic acid
- C. Propionic acid
- D. Butyric acid

188. Bacillushas the ability to form gas during sugar fermentation.

- A. Stereothermophilus
- B. Licheniformis
- c. Cereus
- D. Polymyxa

189. Bacillus polymyxa has the ability to fix under anaerobic condition.

- A. Nitrogen
- B. Oxygen

- C. Hydrogen
- D. Carbon

190. Bacillushas the ability to fix Nitrogen under anaerobic condition

- A. Stereothermophilus
- B. Licheniformis
- c. Cereus
- D. <mark>Polymyxa</mark>

191. Bacillus...... is noted for its pathogenicity to 181. Bacillus is a thermophilic species.

- A. Cereus
- B. Stereothermophilus
- C. Subtilis
- D. Licheniformis

192.Ingestion of the sporulated cultures of Bacillusby larvae of Lepidoptera results in paralytic disease.

- A. Stereothermophilus
- B. Thuringiensis
- C. Licheniformis
- D. Cereus

193. Ingestion of the sporulated cultures of Bacillus thuringiensis by larvae ofresults in paralytic disease.

- A. Lady beetle
- B. Lepidoptera
- C. Mirabilis
- D. None of the above

194. Ingestion of the sporulated cultures of Bacillus thuringiensis by larvae of ...Lepidoptera results indisease.

- A. Hemolytic
- B. Paralytic
- C. Lung
- D. Genitourinary

195. Bacillus causes milky disease of Japanese beetle grubs.

A. Popilliae

- B. Licheniformis
- C. Cereus
- D. Subtilis

196. Bacillus popilliae causes of Japanese beetle grubs.

- A. Milky disease
- B. Mad cow disease
- C. Dementia
- D. Noen of the above

197. Bacillus is lethal for mosquito larvae.

- A. Licheniformis
- B. Cereus
- C. Subtilis
- D. Sphaericus

198. Bacillus sphaericus is lethal to larvae

- A. Bird
- B. Mosquito
- C. Beetle

D. None of the above

199. Bacillus is the only bacillus species that is highly pathogenic for animals and humans and it is the causative agent of anthrax.

- A. Anthracis
- B. Licheniformis
- C. Cereus
- D. Subtilis

200. Bacillus anthracis is the only bacillus species that is highly pathogenic for animals and humans and it is the causative agent of

A. <mark>Anthrax</mark>

- B. TB
- C. Cholera
- D. Ebola

201. Which of the given is not the characteristic feature of Sporosarcina?

- A. Cocci
- B. Arranged in tetrads or cubical packets of eight cells
- C. Widely distributed in marine water
- D. Role in urea decomposition

202. Sporosarcina play active role in decomposition of

- A. Amino acid
- B. Hypoxanthin
- C. <mark>Urea</mark>
- D. Ammonia

203. Which of the given is not the characteristic feature of clostridium?

- A. Fermentative type of metabolism
- B. Widely distributed in soil, marine and freshwater anaerobic sediment
- C. Aerobic non spore forming cocci
- D. Differentiated on the basis of proteolytic activity

204. Clostridium causes a severe and often fatal type of food poisoning know as botulism.

- A. <mark>Botulinum</mark>
- B. Tetani
- C. perfringens
- D. Difficile

205. Clostridium botulinum causes a severe and often fatal type of food poisoning know as.....

- A. Botulism
- B. Tetanus
- C. Wound infection
- D. None of the above

206. Clostridium is a causative agent of tetanus.

- A. Botulinum
- B. Tetani
- C. perfringens
- D. Difficile

207. Clostridium tetani is a causative agent of

- A. <mark>Tetanus</mark>
- B. Gas gangrene
- C. Botulinum
- D. Colitis

208. Clostridium is the major causative agent of wound infection known as gas gangrene

- A. Botulinum
- B. Tetani
- C. perfringens
- D. Difficile

209. Clostridium perfringens is the major causative agent of wound infection known as

- A. Tetanus
- B. Gas gangrene
- C. Botulinum
- D. Colitis

210. Clostridium perfringens is the major causative agent of known as gas gangrene

- A. Respiratory trach infection
- B. Gastrointestinal tract infection
- C. wound infection
- D. Kidney infection

211.Clostridium is a causative agent of pseudomembranous colitis, a severe disease of bowl.

- A. Botulinum
- B. Tetani
- c. perfringens
- D. Difficile

212. Clostridium difficile is a causative agent of, a severe disease of bowl.

- A. Pseudomembranous colitis
- B. Lactose intolerance
- C. Hepatocellular carcinoma
- D. None of the above

213. Clostridium difficile is a causative agent of pseudomembranous colitis, a severe disease of

A. Bowl

- B. Kidney
- C. GIT
- D. None of the above

214.Clostridium is thermophilic.

- A. Botulinum
- B. Thermosaccharolyticum
- c. Tetani
- D. perfringens

215. The optimum growth temperature of clostridium thermosaccharolyticum is degree Celsius.

- A. 55
- B. 45
- C. 67
- D. 83

216. The minimum growth temperature of clostridium thermosaccharolyticum is degree Celsius.

- A. 55
- в. <mark>45</mark>
- c. 67
- d. 83

217. The maximum growth temperature of clostridium thermosaccharolyticum is degree Celsius.

- A. 55
- в. 45
- с. <mark>67</mark>
- d. 83

218. Which of the given is the characteristics feature of Clostridium thermosaccharolyticum?

- A. Grow optimally at 55-degree Celsius
- B. Spore forming
- C. Spores are extremely resistant to heat
- D. All of the above

219. Clostridium is particularly noted for its ability to fix N2

- A. Botulinum
- B. Tetani
- c. perfringens
- D. Pasteurianum

220. Clostridium pasteurianum is particularly noted for its ability to

- A. Fix N2
- B. Plasmodesmata
- C. Gap junction
- D. Transfer water

221. Members of genus desulfotomaculum obtain energy by

- A. Anaerobic respiration
- B. Aerobic respiration

- C. Aerobic fermentation
- D. None of the above

222. Members of genus desulfotomaculum obtain energy by anaerobic respiration with serving as terminal electron acceptor.

- A. Lactic acid
- B. Pyruvic acid
- C. Sulfate
- D. Both A and B

223. Members of genus desulfotomaculum obtain energy by anaerobic respiration with serving as electron donor.

- A. Lactic acid
- B. Pyruvic acid
- c. Sulfate
- D. Both A and B

224. During growth of Desulfotomaculum large amount of formed during growth.

- A. <mark>H2S</mark>
- B. CH4
- С. СНЗСООН
- D. CH3COO-

225. Which of the following is not the characteristics of nonspore forming gram positive rods?

- A. Harmless saprophytes as well as parasitic and pathogenic organisms
- B. Cell ranges from small cocci to large cocci
- C. Both A and B
- D. None of the above

226. Which of the given is an example of nonspore forming positive rod od regular shape?

- A. Clostridium
- B. Staphylococci
- C. Pseudomonas
- D. Lactobacillus

227. In non-spore forming positive rods, the genus is unusual in that it is composed of large, disk-shaped cells arranged in trichomes

- A. Lactobacillus
- B. Pseudomonas
- C. Caryophanon
- D. Kurthia

228. Which of the given is not the characteristic feature of Non spore forming positive rods of irregular shape?

- A. Straight or slightly curved rods that exhibit swelling
- B. Example is Lactobacillus
- C. Aerobic or facultatively anaerobic nature
- D. Respiratory as well as fermentative type of metabolism

229. Which of the given is the characteristics feature of lactobacillus?

- A. Long to very short rods
- B. Strictly fermentative organism
- C. Large amount of lactic acid formed
- D. All of the above

230. Which of the given is not the characteristics feature of lactobacillus?

A. Occur as a parasite in mouth, vagina and intestinal tract of humans

- B. Strictly fermentative organism
- C. Both homo and heterofermentative
- D. Occur as a parasite in fermenting organism

231. Which of the given is not the characteristic feature of listeria?

- A. Motile by peritrichous flagella
- B. Aerophilic or microaerophilic
- C. Very small cocci
- D. Example is Listeria monocytogenes

232. In human Listeria monocytogenes causes in adults?

- A. Meningitis
- B. Prenatal disease
- C. Postnatal disease
- D. None of the above

233. In human Listeria monocytogenes causes in infants?

- A. Meningitis
- B. Prenatal disease
- c. Postnatal disease
- D. Both B and C

234. Which of the given is not the characteristic feature of Erysipelothrix?

- A. Filament forming rods
- B. Aerobic
- C. Parasitic on mammals, birds and fish
- D. Causes erysipeloid in swine

235. Erysipelothrix causes in swine.

A. Erysipelas

- B. Erysipeloid
- C. Erythrocytosis
- D. None of the above

236. Erysipelothrix causes in humans.

- A. Erysipelas
- B. Erysipeloid
- c. Erythrocytosis
- D. None of the above

237. Which of the given is not the characteristic feature of Brocothrix?

- A. Rods often occurring in long kinked filament
- B. Motile
- C. Facultative anaerobe
- D. Found in meat and meat product

238. Which of the given is the characteristic feature of Brocothrix?

- A. Found in meat and meat products
- B. Saprophytes
- C. Best growth occurs at 20 to 22 degree Celsius
- D. All of the above

239. Which of the given is not the characteristic feature of Renibacterium?

- A. Short rods
- B. Non motile
- C. Anaerobic
- D. Catalase positive

240. Which of the given is the characteristic feature of Renibacterium?

- A. Best growth occurs at 15 to 18 degree Celsius
- B. Parasite of salmonid fishes
- C. Causing a kidney disease
- D. All of the above

241. Which of the given is not the characteristic feature of Kurthia?

- A. Rods in chain
- B. Motile by peritrichous flagella
- C. Catalase negative
- D. Aerobic

242. Which of the given is the characteristic feature of Kurthia?

- A. Harmless saprophyte occurring in meat and meat products and in animal dung
- B. Catalase positive
- C. Aerobic
- D. All of the above

243. Which of the given is not the characteristic feature of Caryophanon?

A. Large disc shaped arranged in trichomes

B. Non motile

- C. Aerobic
- D. Saprophytic
- 244. Which of the given is the characteristic feature of Caryophanon?
 - A. Motile by polar flagella
 - B. Anaerobic
 - C. Parasitic
 - D. Occur in ruminant dung

245. Which of the given is not the characteristic feature of Corynebacterium?

- A. Rod shaped cells
- B. Exhibit club shaped swelling
- C. Cell accumulate intracellular volutin granules
- D. Cell wall does not contain mycolic acid

246. Corynebacterium cells accumulate intracellular volutin granules which stain with dilute methylene blue.

- A. Reddish purple
- B. Bluish green
- C. Metalic green
- D. Black to grey

247. Corynebacterium cells accumulate intracellular volutin granules which stain reddish purple with dilute

A. Methylene blue

- B. Phenolphthalein
- C. Fuchsin
- D. ETBR

248. Corynebacterium cells accumulate intracellular granules which stain reddish purple with dilute methylene blue

A. Xanthine

- B. Volutin
- C. Basophile
- D. Eosinophile

249.cells accumulate intracellular volutin granules which stain reddish purple with dilute methylene blue

- A. Staphylococcus
- B. Pseudomonas
- C. Corynebacterium

D. Mycoplasma

250. The mycobacterium cell wall contains containing 32 to 36 carbon atoms.

- A. Oxidoreductase
- B. Myristic acid
- C. Mycolic acid
- D. Linoleic acid

251. The mycobacterium cell wall contains mycolic acid containing carbon atoms.

- <mark>A. 32 to 36</mark>
- B. 16 to 20
- C. 8 to 12
- D. 12 to 16

252. Corynebacterium is a causative agent of Diphtheria in humans.

- A. Aeruginosa
- B. Diphtheriae
- C. Linens
- D. Aureus

253. Corynebacterium diphtheriae is a causative agent ofin humans.

- A. TB
- B. Diphtheria
- C. Tetanus
- D. Cholera

254. Which of the given is not the characteristic feature of Arthrobacter?

- A. Saprophytic soil organism
- B. Shows rod-coccus cycle
- C. When inoculated in fresh media give rise to cocci shaped cells
- D. None of the above

255. In Arthrobacter, cell in the phase of growth are irregularly shaped rods that may show a tendency towards rudimentary branching.

- A. Lag
- B. <mark>Log</mark>
- C. Stationary
- D. Death

256. In Arthrobacter, cell in the log phase of growth are irregularly shaped rods that may show a tendency towards.....

- A. Rudimentary branching
- B. Synthetic branching
- C. Alternate chain
- D. 2,6 linkage branching

257. In Arthrobacter, cell in thephase of growth are distinctly coccoid that and when these are inoculated into fresh media, they give rise to rod shaped cell.

- A. Lag
- B. Log
- C. Stationary
- D. Death

258. In Arthrobacter, cell in the stationary phase of growth are distinctlythat and when these are inoculated into fresh media, they give rise to rod shaped cell.

- A. Coccoid
- B. Rods
- C. Spiral

D. Helical

259. In Arthrobacter, cell in the stationary phase of growth are distinctly coccoid that and when these are inoculated into fresh media, they give rise to rod shaped cell.

- A. Coccoid
- B. <mark>Rod</mark>
- c. Spiral
- D. Helical

260. Which of the given is not the characteristic feature of Brevibacterium?

- A. Do not exhibit rod- coccus cycle
- B. Found on the surface of cheese
- C. Produce proteolytic enzyme that aid in the cheese ripening process
- D. None of the above

261. Brevibacterium forms orange colonies on artificial media and is salt tolerant.

- A. Aureus
- B. Cerevisiae
- C. Linens
- D. Aeruginosa

262. Brevibacterium linens formscolonies on artificial media and is salt tolerant.

- A. Green
- B. Blue
- C. Orange
- D. Black

263. Brevibacterium linens forms orange colonies on artificial media and is tolerant.

- A. Dryness
- B. Salt
- C. High sugar conc.
- D. Acid

264. Which of the given is not the characteristic feature of Microbacterium?

- A. Small, slender, irregular shaped rods
- B. Do not exhibit rod-cocci cycle
- C. Parasite of human
- D. None of the above

265. Microbacteria are that occur in milk, in dairy products, and on dairy products.

- A. Parasite
- B. Saprophyte
- C. Spite
- D. Commensal

266. Which of the given is not the characteristic feature of Cellulomonas?

- A. Irregularly shaped rods
- B. Slightly filamentous and show rudimentary branching
- C. Exhibit rod-coccus cycle
- D. Ability to degrade cellulose

267. Cellulomonas have the characteristics ability to degrade and to use it as a major carbon and energy source.

- A. Pectin
- B. Chitin

C. Cellulose

D. Peptidoglycan

268.have the characteristics ability to degrade cellulose and to use it as a major carbon and energy source.

- A. Cellobiomes
- B. Cellulomonas
- C. Cellulasebacillus
- D. All of the above

269. Which of the given is not the characteristics feature of Aerobic/facultative aerobic branched filamentous rods?

- A. Firstly, bacteria form microscopic colonies and then macroscopic
- B. Contains branched filamentous rods
- C. As the colonies develop to macroscopic size many of cell becomes coccoid
- D. None of the above

270. Which of the given is not the characteristic feature of Agromyces?

- A. Microaerophilic to aerobic
- B. Catalase positive
- C. Saprophytic
- D. None of the above

271. Which of the given is not the characteristic feature of Arachnia?

A. Facultatively aerobic

- B. Catalase negative
- C. Parasitic and pathogenic for humans and animals
- D. Causative agent of actinomycosis

272. Arachnia is a causative agent of

- A. Colitis
- <mark>B. Actinomycosis</mark>
- C. Cirrhosis
- D. Syphilis

273. Which of the given is the characteristic feature of Rothia?

- A. Anaerobic
- B. Catalase negative
- C. Normal inhabitant of human mouth
- D. All of the above

274. Which of the given is the characteristic feature of Anaerobic Non filamentous or filamentous rods?

- A. Either anaerobic or facultatively anaerobic
- B. Differentiated by morphology and fermentation end product
- C. Examples are Propionibacterium
- D. All of the above

275. Which of the given is an example of Anaerobic monofilamentous or filamentous rod?

- A. Propionibacterium
- B. Actinomyces
- C. Both A and B
- D. None of the above

276. Which of the given is not the characteristic feature of Mycobacteria?

- A. Slightly curved or straight rods
- B. Mycolic acids having about 90% of carbon atom occur in cell wall
- C. Non acid fast
- D. None of the above

277. Mycobacteria once stain with aniline dyes is difficult to decolorize, even when treated with mixture of acid and alcohol. This property of mycobacteria is known as.....

- A. Fastidious
- B. Non fastidious
- C. Acid fast
- D. Nonacid fast

278. species of mycobacteria are harmless saprophyte.

- A. Phlei
- B. Smegmatis
- C. Kansaii
- D. Both A and B

279. Mycobacterium is a causative agent of Tuberculosis in humans.

- A. Lepri
- B. Tuberculosis
- C. Phlei
- D. Smegmatis

280. Mycobacterium cause noncontagious tuberculosis like infection.

- A. Kansaii
- B. Intracellulare
- C. Both A and B
- D. Leprae

281. Mycobacterium tuberculosis is a causative agent ofin humans

- A. Cholera
- B. <mark>TB</mark>

- C. Bacillary dysentery
- D. None of the above

282. Mycobacterium Kansaii cause like infection.

A. Noncontagious tuberculosis

- B. Tuberculosis
- C. Leprosy
- D. None of the above

283. Mycobacterium causes lymphadenitis in children.

- A. Kansaii
- B. Intracellulare
- C. Scrofulaceum
- D. None of the above

284. Mycobacterium scrofulaceum causesin children.

- A. Lymphadenitis
- B. Tuberculosis
- C. Leprosy
- D. None of the above

285. Mycobacterium is a causative agent of leprosy.

- A. Kansaii
- B. Intracellulare
- C. <mark>leprae</mark>
- D. Scrofulaceum

286. Mycobacterium leprae is a causative agent of

A. Lymphadenitis

- B. Tuberculosis
- C. Leprosy
- D. None of the above

287. Nocardioforms contains aerobic bacteria that produce a

- A. Acetic acid
- B. Propionic acid
- C. Substrate mycelium
- D. None of the above

288. with respect to their morphology and cell wall composition they are referred to as the nocardiforms.

- A. <mark>Nocardia</mark>
- B. Substrate
- C. Mycolica
- D. None of the above

289. Nocardia with respect to their morphology and cell wall composition they are referred to as the

A. Nocardiforms

- B. Mycoforms
- C. Coliforms
- D. None of the above

290. Genus nocardia contains species.

A. Acid fast

- B. Nonacid fast
- C. Fastidious
- D. All of the above

291. Which of the given is not the characteristic feature of Propionibacterium?

- A. Pleomorphic
- B. Motile
- C. Forms propionic acid and acetic acid by fermentation
- D. Some species may cause acne

292. Propionibacterium may be related to the skin disease acne vulgaris.

- A. Ptutida
- B. Actinomycetes
- C. Acnes
- D. None of the above

293. Propionibacterium acnes may be related to the skin disease

A. Acne vulgaris

- B. Cirrhosis
- C. Meningitis
- D. Skin papilloma

294. Which of the given is a characteristic feature of Eubacterium?

- A. Pleomorphic
- B. Motile or non-motile
- C. Found in human oral cavity, spoiled food
- D. All of the above

295. Eubacteria are found in

- A. Human oral cavity
- B. Intestinal tract of human and animals
- C. Infected tissue, soil, water and spoiled food
- D. All of the above

296. Which of the given is the characteristic feature of actinomyces?

- A. Acetic acid or formic acid is a product of fermentation
- B. Initially cells are filamentous with branching
- C. Found in oral cavity of humans
- D. All of the above

297. Actinomyces can cause human actinomycosis.

- A. Bovis
- B. Iseaelii
- C. Ptutida
- D. All of the above

298. Actinomyces can cause cattle actinomycosis.

- A. Bovis
- B. Iseaelii
- c. Ptutida
- D. All of the above

299. Actinomyces Iseaelii can cause human

- A. Actinomycosis
- B. Zygomycotic
- C. Myxomycosis
- D. Acetonuria

300. Which of the given is not the characteristic feature of Bifidobacterium?

- A. Pleomorphic
- B. Motile
- C. Acetic acid and lactic acid as a fermented end product
- D. None of the above

301. Which of the given is the characteristic feature of Bifidobacterium?

- A. Found in spoiled food
- B. Highly pathogenic
- C. Motile
- D. Acetic acid and lactic acid as a fermented end product

302. Which of the given is the characteristic feature of Nocardioforms?

- A. Peptidoglycan contains meso diaminopimelic acid
- B. No glycine interpeptide bridges occur between the peptidoglycan chain
- C. The wall contains the sugars arabinose and galactose
- D. All of the above

303. The wall of members of genus streptomyces contains......

- A. LL diaminopimelic acid
- B. Glycine interpeptide bridges
- C. Both A and B
- D. None of the above

304. Which of the given is not the characteristic feature of Nocardia?

- A. Saprophyte
- B. Mainly infects plants
- C. Can be opportunistic pathogen
- D. Widely distributed in soil and water

305. does not contain nocardomycolic acid.

- A. Nocardia
- B. Pseudonocardia
- C. Pseudomonas
- D. None of the above

306. Pseudonocardia does not containin contrast to the hyphae of nocardia.

- A. Marcopeptic acid
- B. Nocardomycolic acid
- C. Both A and B
- D. None of the above

307. Which of the given is the characteristic feature of Pseudonocardia?

- A. Does not contain nocardomycolic acid
- B. Highly pathogenic
- C. Occur in plant roots
- D. All of the above

308. Which of the given is the characteristic feature of Anoxygenic phototrophic bacteria?

- A. Belong to the order Rhodospirillales
- B. Gram positive
- C. Not capable of carrying out photolithotrophic metabolism
- D. Not capable of carrying out photo organotrophic type of metabolism

309. Which of the given is not the characteristic feature of Anoxygenic phototrophic bacteria?

- A. Contains bacteriochlorophyll
- B. Grow phototrophically only under aerobic condition
- C. Capable of forming Oxygen
- D. Gram negative

310. Which of the given is not the characteristic feature of Oxygenic phototrophic bacteria?

A. Bacteria contain chlorophyll

- B. Use light as an energy source
- C. Does not evolve oxygen
- D. Include cyanobacteria

311. Which of the given is not the characteristic feature of Gliding fruiting bacteria?

- A. Gram negative
- B. Phototrophic bacteria
- C. Lack flagella
- D. Cells swarm together in masses and form fruiting bodies.

312. Which of the given is not the characteristic feature of gliding non fruiting bacteria?

A. Gram positive

- B. Non phototrophic bacteria
- C. Fruiting bodies are not produced
- D. Can glide across solid surface

313. Which of the given is not the characteristic feature of sheathed bacteria?

- A. Gram negative
- B. Non phototrophic bacteria
- C. Forms an external sheath that covers the chains or trichomes
- D. None of the above

314. Which of the given is not the characteristic feature of Budding or appandaged bacteria?

A. Gram positive

- B. Non phototrophic bacteria
- C. Reproduce asymmetrically
- D. Reproduce by budding

315. Which of the given is not the characteristic feature of Chemolithotrophic bacteria?

- A. Non phototrophic
- B. Gram negative
- C. Obtain energy by nitrogen fixation from oxidation of ammonia
- D. None of the above

316. Chemolithotrophic bacteria obtain energy by fixation from the oxidation of ammonia, nitrite, reduced sulfur compounds or ferrous ions.

- A. Nitrogen
- B. Carbon dioxide
- C. Sulfur
- D. Oxygen

317. Chemolithotrophic bacteria obtain energy by Carbon dioxide fixation from the oxidation of

- A. Ammonia
- B. Nitrite
- C. Reduced sulfur compounds
- D. All of the above

318. Chemolithotrophic bacteria obtain energy by Carbon dioxide fixation from theof ammonia, nitrite, reduced sulfur compounds or ferrous ions.

- A. Reduction
- B. Oxidation
- C. Oxidoreduction
- D. None of the above

319. Which of the given is not the characteristic feature of Archaebacteria?

A. Polygenetically similar to Eubacteria

- B. Some produce methane gas
- C. Gram positive or gram negative
- D. Some require high level of NaCl for growth

320. Which of the given is not the characteristic feature of Anoxygenic phototrophic bacteria?

- A. Occur in anaerobic freshwater
- B. Contain bacteriochlorophyll
- C. Does not contain carotenoid pigment
- D. None of the above

321. Anorexic bacteria are divided into different forms on the basis of pigment formation such as.....

- A. Purple bacteria
- B. Yellow bacteria
- C. Green bacteria
- D. Both A and C

322. Family exhibit gliding type of motility.

A. Chloroflexaceae

- B. Rhodospirillaceae
- C. Mycoplaceae
- D. None of the above

323. Which of the given is not a characteristic feature of purple phototrophic bacteria?

- A. Contains bacteriochlorophyll
- B. Contain auxiliary carotenoids
- C. Both A and B

D. None of the above

324. The family Rhodospirillaceae contains the

- A. Purple sulfur bacteria
- B. Purple nonsulfur bacteria
- C. Green sulfur bacteria
- D. Green nonsulfur bacteria

325. The familycontains the purple nonsulfur bacteria

- A. Rhodospirillaceae
- B. Chlorophyceae
- C. Myxomycete
- D. None of the above

326. Culture of family Rhodospirillaceae appear orange brown to under aerobic condition.

A. Purple red

- B. Violet blue
- C. Yellow brown
- D. None of the above

327. Culture of family Rhodospirillaceae appear orange brown to purple red undercondition.

- A. Anaerobic
- B. <mark>Aerobic</mark>
- C. Both A and B
- D. None of the above

328. Rhodospirillum is in shape

- A. Ovoid
- B. Cocci
- C. Helical
- D. Rod

329. Rhodopseudomonas is in shape.

- A. Rod
- B. Ovoid
- C. Spherical
- D. All of the above

330. Rhodomicrobium is in shape.

- A. <mark>Ovoid</mark>
- в. Соссі
- c. Helical
- D. Rod

331. The purple nonsulfur bacteria are.....

- A. Photolithotrophs
- B. Photoorganotrophs
- C. Lithotrophs
- D. Lithoautotrophs

332. Which of the given is not the characteristic feature of Purple nonsulfur bacteria?

- A. Organic substant serve as carbon source and as an electron donor
- B. All species are heterotrophic
- C. Photosynthesis occurs only under anaerobic condition in the light
- D. None of the above
333. The family contains purple sulfur bacteria?

- A. Chromatiaceae
- B. Myxomycoceae
- C. Actinomycoses
- D. Phaeophycean

334. The family Chromatiaceae contains?

- A. Purple sulfur bacteria
- B. Green bacteria
- C. Mycobacteria
- D. Mycoplasma

335. The culture of purple sulfur bacteria appear colored.

- A. Orange-brown
- B. Purple-violet
- C. Both A and B
- D. None of the above

336. Which of the given is not an example of purple sulfur bacteria?

- A. Chromatium
- B. Achromobacter
- C. Thiocystis
- D. Lamprocystis
- 337. Chromatium is shaped
 - A. Cocci
 - B. Rod
 - C. Oval
 - D. Helical

338. Thiocystis is shaped.

A. Cocci

- B. Rod
- c. Oval
- D. Helical

339. Thiospirillum is shaped.

- A. Cocci
- B. Rod
- c. Oval
- D. Helical

340. Lamprocystis is shaped.

- A. Cocci
- B. Diplococci
- c. Rod
- D. Oval

341. Thiosarcina is shaped.

- A. Cocci
- B. Cubical packets
- c. Rod
- D. Oval

342. Thiopedia is..... in shape.

A. Flat sheets

- B. Cocci
- c. Rod
- D. Oval

343. Which of the given organism is rod shaped?

A. Chromatium

- B. Thiocystis
- C. Thiospirillum
- D. Lamprocystis

344. Which of the given organism is cocci shaped?

- A. Chromatium
- B. Thiocystis
- c. Thiospirillum
- D. Lamprocystis

345. Which of the given organism is helical shaped?

- A. Chromatium
- B. Thiocystis
- c. Thiospirillum
- D. Lamprocystis

346. Which of the given organism is diplococcal in shaped?

- A. Chromatium
- B. Thiocystis
- c. Thiospirillum
- D. Lamprocystis

347. Which of the given organism is cubical packet shaped?

- A. Chromatium
- B. Thiocystis
- C. Thiosarcina
- D. Thiopedia

348. Which of the given organism is flat sheet shaped?

- A. Chromatium
- B. Thiocystis
- c. Thiosarcina
- D. Thiopedia

349. Culture of green phototrophic bacteria are...... in color.

- A. Green
- B. Brown
- C. Both A and B
- D. None of the above

350. Which of the given is not the characteristic feature of green phototrophic bacteria?

- A. Contain bacteriochlorophyll type c and d
- B. Cultures are red colored
- C. Chlorophyll pigment involved in photosynthesis
- D. All of the above

351. Which of the given is family comes under green phototrophic bacteria?

- A. Chlorobiaceae
- B. Chloroflexaceae
- C. Both A and B
- D. None of the above

352. The family Chlorobiaceae contains......

A. Green sulfur bacteria

- B. Purple sulfur bacteria
- C. Green silicon bacteria
- D. None of the above

353. The familycontains green sulfur bacteria.

- A. Chlorobiaceae
- B. Mycobacteriaceae
- C. Chloroflexaceae
- D. None of the above

354. Green sulfur bacteria are..... in shaped.

- A. Ovoid
- B. Bean
- C. Rod
- D. All of the above

355. Which of the given organism comes under chlorobiaceae family?

- A. Chlorobium
- B. Prosthecochloris
- C. Both A and B
- D. None of the above

356. Organisms comes under genus prosthecochloris are of shaped.

- A. Oval
- B. Star
- C. Cocci
- D. Rod

357. Which of the given is the characteristic feature of Green phototrophic bacteria?

- A. Live as photolithotrophs
- B. Using H2S as the electron donor for CO2 fixation
- C. Anaerobic
- D. Capable of growing in a dark

358. The family chloroflexaceae contain the

- A. Green sulfur bacteria
- B. Green nonsulfur bacteria
- C. Purple sulfur bacteria
- D. Purple non sulfur bacteria

359. The familycontain the Green nonsulfur bacteria

- A. Chloroflexaceae
- B. Chlorobiaceae
- C. Both A and B
- D. None of the above

360. Which of the given is not the characteristic feature of genus chloroflexus?

- A. Mesophilic
- B. Occur in hot spring
- C. Forms green or orange mats on hot springs
- D. Occur as a filament or trichomes and exhibit gliding motility

361. Which of the given is not the characteristic feature of cyanobacteria?

- A. Unicellular
- B. Non motile
- C. Trichome formers usually possess gliding motility
- D. Flagella are present

362. Cyanobacteria occur as an algal symbiont where they fix atmospheric......

- A. Oxygen
- B. Nitrogen
- C. Carbon
- D. None of the above

363. When cyanobacteria associate with certain protozoa where they are called

.....

A. Cyanellae

- B. Glauca
- C. Gleotrichia
- D. None of the above

364. Cyanobacteria does not contain

- A. Chlorophyll a
- B. Bacteriochlorophyll
- C. Carotenoids
- D. Phycobilin

365. Cyanobacteria contain water insoluble......

- A. Bacteriochlorophyll
- B. Carotenoids
- c. Phycobilin
- D. None of the above

366. Cyanobacteria contain water soluble......

- A. Bacteriochlorophyll
- B. Carotenoids
- c. Phycobilin
- D. None of the above

367. Cyanobacteria possessing phycoerythrin have acolor instead of the usual bluish green hue.

<mark>A. Red or brown</mark>

B. Black or grey

- C. Yellow green
- D. None of the above

368. Cyanobacteria are and because of photosystem II they can use H2O as an electron donor for CO2 fixation.

- A. Photolithotrophs
- B. Photoautotrophs
- C. Chemolithotrophs
- D. None of the above

369. Cyanobacteria are Photolithotrophs and because of photosystem they can use H2O as an electron donor for CO2 fixation.

- A. I
- B. <mark>II</mark>
- C. III
- D. IV

370. Cyanobacteria are Photolithotrophs and because of photosystem the II they can use as an electron donor for CO2 fixation.

- A. H2O
- B. CH3COOH
- C. HCL
- D. None of the above

371. Cyanobacteria are Photolithotrophs and because of photosystem the II they can use H2O as an electron donor forfixation.

- A. CO2
- B. H2O
- C. N2
- D. H2

372. Some cyanobacteria can also useas an electron donor in a manner similar to that used by the green sulfur bacteria.

- A. H2S
- B. H2O
- C. N2
- D. H2

373. Many trichome forming cyanobacteria can fix......

- A. H2O
- B. <mark>N2</mark>
- C. H2
- D. HCl

374. Nitrogen fixation is possible in because they lack photosystem II and therefore do not evolve oxygen.

- A. Pseudomonas
- B. Heterocyst
- C. Chlamydomonas
- D. None of the above

375.fixation is possible in heterocyst because they lack photosystem II and therefore do not evolve oxygen.

- A. Oxygen
- B. Carbon
- C. Nitrogen
- D. Sulfur

376. Nitrogen fixation is possible in heterocyst because they lack photosystem II and therefore do not evolve

- A. <mark>Oxygen</mark>
- B. Sulfur
- C. Carbon dioxide
- D. Carbon monoxide

377. Some cyanobacteria that form heterocyst also form large thick-walled cyst like cells called which are resistant to desiccation.

- A. Akinetes
- B. Ookinetes
- C. Homokis
- D. None of the above

378. Some cyanobacteria that form heterocyst also form large thick-walled cyst like cells called akinetes which areto desiccation.

- A. Sensitive
- B. Resistant
- C. Permeable
- D. Impermeable

379. Which of the given is not the characteristic feature of Prochlorophytes?

- A. Multicellular
- B. Contain chlorophyll b and a
- C. Lack phycobilin pigment
- D. Appear grass green

380. Which of the given genus comes under Prochlorophytes?

A. Prochloron

- B. Probiotic
- C. Prochrome
- D. Protobiont

381. Which of the given is not the characteristic feature of gliding fruiting bacteria?

- A. Gram negative
- B. Phototrophic
- C. Non flagellated
- D. None of the above

382. Myxobacterales means......

- A. Mucus
- B. Slime
- C. Both A and B
- D. None of the above

383. Which of the given is not the characteristic feature of Myxospores?

- A. Shorter and thicker than vegetative cells
- B. Resistant to desiccation
- C. Resistant to heat
- D. Resistant to UV radiation

384. Which of the given is the characteristic feature of Myxobacters?

- A. Strictly aerobic
- B. Many develop colorful pigment in their normal environment
- C. Some species produce exocellular enzyme that degrades complex substances
- D. All of the above

385. Which of the given is not the characteristic feature of Gliding non fruiting bacteria?

- A. Gliding motility
- B. Anaerobic
- C. Many species degrade natural polymer such as cellulose, chitin, pectin, keratin

D. None of the above

386. In gliding non fruiting bacteria, genus...... forms myxospores.

- A. Sporocytophaga
- B. Clamydia
- C. Clamydiospore
- D. None of the above

387. In gliding non fruiting bacteria, genus sporocytophaga forms

- A. <mark>Myxospores</mark>
- B. Ascospores
- C. Basidiospores
- D. None of the above

388. Many gliding non fruiting bacteria degrade natural polymer

- A. Cellulose or chitin
- B. Agar
- C. Pectin and keratin
- D. All of the above

389. Capnocytophage is unusual because of its occurance in of human.

A. Oral cavity

- B. Respiratory tract
- C. Genital area
- D. None of the above

390. Which of the given is not the characteristic feature of Beggiatoa?

A. Aquatic

- B. Occur in microaerophilic environment
- C. H2S is reduced by cell to elemental sulfur
- D. May be an autotrophic organism

391. Which of the given organism is not rod shaped or filamentous?

- A. Cytophaga
- B. Flexibacter
- C. Vitreoscilla
- D. Beggiatoa

392. Which of the given organism is not multicellular trichome shaped?

- A. Simonsiella
- B. Saprospira
- C. Vitreoscilla
- D. Thiothrix

394. genera of gliding non fruiting bacteria produce a sheath which encloses the individual cells.

- A. Herpetosiphon
- B. Flexithrix

C. Both A and B

D. None of the above

395. Which of the given is not the characteristics of the sheathed bacteria?

A. Gram positive

- B. Aerobic
- C. Non phototrophic
- D. Forms sheath surrounding the chain of cells

396. Which of the given is not the sheathed bacteria?

- A. Sphaerotilus
- B. Leptothrix
- C. Hyphomicrobium
- D. Heliscomenobacter

397. Which of the given organism comes under sheathed bacteria?

- A. Clonothrix
- B. Crenothrix
- C. Phragmidiothrix
- D. All of the above

398. Which of the given is not the characteristic feature of sphaerotilus?

- A. Cells occur in chains of rods
- B. Also called swarm cells
- C. Cocci shaped
- D. Possess polar or subpolar flagella

399. Sphaerotilus is a common species that that normally occurs in polluted water

- A. Aureus
- B. Natans
- C. Ptutida
- D. None of the above

400. organism sometimes referred as iron bacteria.

A. Sphaerotilus

- B. Pseudomonas
- C. Serratia
- D. Alcaligens

401. Sphaerotilus organism sometimes referred as bacteria.

- A. Sweat
- B. Iron
- C. Sulfur
- D. Polysaccharide

402. Which of the given is an example of gliding fruiting bacteria?

- A. Stigmatella aurantiaca
- B. Chondromyces crocatus
- C. Both A and B
- D. None of the above

