MUHAMMAD ZAHID	BT102 Microbiology
MCQs	Fall 2020 (22 December 2020)
Grand Quiz	Midterm

1. Rigid layer outside the plasma membrane is.....**Cell wall**
2. Capsule is responsible for .....**virulence**
3. Which of the following is the function of cell wall?..... **All of the given option**
4. Lipid bilayer is present in ___.....**Cell membrane**
5. Movement against the concentration gradient is known as .....**Active transport**
6. LPS stands for .....**Lapopolysachrides**
7. Cytoplasm contains _____ percent wat.....**80%**
8. Which of the following has high susceptibility to penicillin? .....**Gram Positive Bacteria**
9. Which of the following contain mycolic acid?..... **Mycobacterium & Nocardia**
10. Which of the following is used for attachment?..... **Both fimbriae & pili**
11. Which of the following is the most important structure in prokaryotes?..... **Cell Wall**
12. Which of the following is the smallest bacterium?..... **Mycoplasma**
13. Flagella is responsible for.....**Locomotion**
14. Which of the following is used for DNA Transfer?.....**Pili**
15. Flagella move ____ for forward thrust..... **Both counter clockwise& run/swim**
16. _____are used for twitching motility.....**Pili**
17. Which of the following is responsible for protein synthesis?.....**Ribosomes**
18. Which of the fallowing is the type of membrane protein?..... **Both peripheral & integral proteins**
19. Which of the following bacteria has atypical cell wall?.....**Mycoplasma**
20. After Gram staining, Gram positive bacteria appear_____.....**Purple**
21. Extrachromosomal DNA is known as. .....**Plasmid**
22. Gram Positive bacteria produce _____.....**Exotoxins**

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23. Gram negative bacteria produce ……..**Exotoxins and Endotoxins**

24. 70S ribosomes consist of two subunits, _____..... **50S, 30S**

25. Rod shaped bacteria are called_____.....**Bacilli**

26. Which of the following structure used for moving?..... **Flagella**

27. Lipid A is responsible for .....**All of the given option**

28. Which of the following disease caused by spirochetes?.....**All of the given option**

29. _____ is composed of pilin…….. **Both Pili & Fimbriae**

30. Which of the following is responsible for destruction of cell membrane?.....**All of the given options**

31. The basal body of flagellum of Gram-positive bacteria consist of _____ ring……**2**

32. The basal body of flagellum of Gram-negative bacteria consist of _____ ring……**4**

33. Integral proteins are _____ the cell membrane and are ____ in water…….. **Imbedded in, insoluble**

34. Hair like small appendages on G-neg. cells are known as……**Fimbriae**

35. Which of the following is not present in bacteria?.... **both histone & nuclear membrane**

36. Facilitated diffusion is done with the help of…… **Integral protein**

37. Spirochetes bacteria move by.....**Axial filaments**

38. Long filamentous structure that propels bacteria is known as…….. **Flagella**

39. When cocci join in chain like structure then the shape is known as .....**Streptococci**

40. Which of the following structures is involved in the locomotion of bacteria……**Flagella**

41. Which of the following condition in which water moves into the cell?..... **Hypotonic**

42. Teichoic acid is made up of.....**All of the given option**

43. Energy is required in…….. **Active movement**

44. Which of the following is used for mating?..... **both Pili & Fimbriae**

45. Which of the following is not part of the flagella?.....**None of the given option**

46. When two round shape bacteria join then it is known as …… **Diplococci**

47. The oil immersion lens microscope is of _____ Power……100X

48. Buffers are used to maintain _____In medium.....PH

49. First drawing of microbes was published by ……Robert Hooke

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50. Photoautotrophs use ____ as source of energy.....Light

51. Ability of the lenses to distinguish between two closely lying objects as separate is known as ..... None of the given options

52. Which of following pH is acidic?..... **A**ll of the given options

53. Bacteria utilize oxygen for :..... Decomposition

54. Phenol and Phenolics compound First widely used antiseptics for disruption.....Plasma membrane

55. Photoautotrophs use Carbon from.....CO_2

56. Kingdom Monera includes ..... Both bacteria and Archae

57. How we can fix the smear?..... Both physical and chemical method

58. Bacteria need _____ for the synthesis of protein and nucleic acids.....Carbon

59. Chemoheterotrophs use Carbon from.....Carbohydrates

60. Substances that absorb short wavelength of light and emit longer wavelength are known as ..... Fluorochromes

61. O_2 has no effect on.....Aerotolerant Aerobes

62. Salts composed of a negative and positive ions are known as.....stains

63. Removal of electrons from an atom is known as.....Oxidation

64. Which of the following is the physical method of microbial control?..... Radiation

65. Naming of the organisms introduced by.....Linnaeus

66. Which of the following gas is used for microbial removal?..... **E**thylene oxide

67. "Motile and unicellular organisms", these characteristics related to which of the following:.....Algae

68. A DNA segment which encodes protein is known as ..... Gene

69. Oxygen is toxic for.....Facultative Anaerobes

70. _____Work ended the spontaneous generation controversy.....Louis Pasteur

71. Which of the following group of microbes strictly need oxygen for growth?..... **O**bligate Aerobes

72. There are ____ Kingdoms in domain Eucarya 4

73. Half the dry weight of microbes is ___..... **Carbon**

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74. The alcohols Ethanol, isopropanol are used for the denaturation of…… **Protein**

75. Which of the following is required to see microorganisms?..... **A**ll of the given options

76. Which of the following bacteria formed endospore?..... **A**ll of the given options

77. Monitoring of diseases in Populations bs Known as…… Epidemiology

78. Which of the following bacteria has waxy material in their cell wall?..... Mycobacterium tuberculosis

79. Soluble antigen binds with antibodies is known as..... **A**ll of the given options

80.NADH and FADH2 are oxidized during..... Electron transport chain

81._____ is transfer of DNA by a virus called bacteriophages..... **Transduction**

82. Which of the following is used for plasma membrane disruption?..... Both phenol and bisphenol

83. Which of the following staining is done for Acid Fast Bacteria?.... Ziehl Neelson Staining

84. Which of the following is used for catalase test?..... **Hy**drogen peroxide

85. Which of the following is the advantage of staining the microbes?..... Increases visibility of microbes

86. All organic compounds contain _____.....Carbon

87. The unicellular form of fungi is known as .....Yeast

88. The multicellular form of fungi is known as .....Mold or Mushroom

89. In which of the following kingdom microbes are placed?..... **A**ll of the given options

90. Microbes are placed in ____ Kingdoms..... Monera, Protista and fungi

91. Which of the following enzymes catalyze the conversion of atmospheric oxygen into hydrogen peroxide?..... Catalase

92. The study of microbes is known as..... Microbiology

93. Psychrophiles are extremophilic organisms that are capable of growth and reproduction in temperatures around..... 15 centigrade

94. Which of the following is hyperthermophile in nature?..... Archae

95. Which of the following is the cellular energy for most of the microbes?.....All of the given options

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96. Which of the following is the enumeration of live bacteria cells?.. All of the given options

97. _______era is called golden age of microbiology .... 1857 – 1914

98. Microorganisms belonging to the ____ group, do not use O2 but can tolerate it fairly well.. Aerotolerant Aerobes

99. Mycology is the study of .... None of the given options

100. The cell wall of Archea composed of special...Lipids

101. Too small to be seen with the unaided eye..................... Both germs & microorganisms

102. Bacteria get sulfur from .... All of the given options

103. Bacteria get nitrogen from... All of the given options

104. Which of the following is required for aerobic respiration?.......... Hydrogen peroxide

105. Which rate is constant for microbes?.............................. None of the given options

106. The halogens Iodine and chlorine Inhibit _______ function.........................Protein

107. Which of the following is the backbone of all organic matter?..................Carbon

108. Which of the following is used as antimicrobial agent?........... All of the given options

109. Which of the following are the first living organisms on our planet?...........bacteria

110. In anaerobic respiration, final electron acceptor is inorganic substance other than O2 is... All of the given options

111. The man behind the cell theory WaS... Robert hooke

112. The habitate of Escherichia coli .... Large intestine

113. Prokaryotes have no ..,,, Nuclear Membrane

114. _________ are Protozoa like at one stage and fungus like in another... Slime Mold

115. Which of the following is the characteristic of coenzyme?....... All of the given options

116. Which of the following is used for inhibition of protein synthesis?...................Iodine

117. Sepsis is stated as.. Microbial Contamination

118. Which of the following is the part of the microscope that directs the light through the specimen?... Condenser

119. Which of the following staining technique is used for Mycobacterium species?... None of the given options

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120. The branch of science which deals the study of bacteria is..... Bacteriology

121. Which of the following is correct about Mycobacterium tuberculosis?..... Facultative Anaerobes

122. Transformation is the horizontal gene transfer between two..... Bacterias

123. Gram Staining falls into which of the following category?..... Differential staining

124. Prokaryotes do not have distinct..... Nuclear membrane

125. Which of the following is the moist heat sterilization?..... All of the given options

126. Primary source for cellular energy is..... Carbohydrate

127. _____ Directs the light through the specimen.....Condenser

128. Duration of Golden age of Microbiology is: .....1857 – 1914

129. Pasting of sample on glass slide is known as ..... Smear Formation

130. Monitoring diseases in a population and detection of outbreaks and developing epidemics are studied under the discipline of..... Epidemiology

131. The primary stain of Gram's method is –..... Crystal Violet

132. Bacteria obtain nitrogen from air by the process of..... Nitrogen fixation

133. Aerobes that require 02 in low amounts are called as ..... Microaerophiles

134. Helicobacter pylori is a..... Aerotolerant Aerobe

135. oiled extracts of hay or meat can give rise to microorganisms, this statement proposed by:..... John Needham

136. the names of domains in three domain classification of microbes are..... Bacteria, Archea and Eucarya

137. Which of the following is the physical source of growth?..... All of the given options

138. Living thing originate from a non-living thing is KNOWN as..... None of the given options

139. Which of the following initiate the spore activation..... Heating

140. Population of cells derived from a single cell is known as..... Clone

141. Which one Is correct answer regarding sterilization..... Removal of microbes and their spores

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142. Five kingdom classification was proposed by the…….. Carl Linnaeus

143. Antigen antibody reactions is a Methods for microbial identification…….Serological

144. Growth of medium in a liquid media with closed vessel is known as…… Batch culture.

145. Ethylene oxide is strong alkylating agent that kills the microbes by reacting with functional groups of block replication and enzymatic activity to……DNA

146. Which of the following is used to see antibody antigen reaction?…….. Both radioisotopes and enzymes

147. A nutrient material for growth is known as …….. **C**ulture medium

148. Prokaryotes and Eukaryotes are …….. similar…….. Chemically

149. NADH and FADH2 during Kreb's cycle oxidized via Electron transport chain and generate ____ ATP molecules……34

150. Which of the following | is required for treatment of diseases and cancer?……antibodies

151. The term "animalcules" for microbes was firstly used by…… Antony van Leeuwenhoek

152. Peptidoglycan is made up of…….. Carbohydrates

153. Microbes first drawing published in……1665

154. Which is the correct order of Acid Fast Staining ?……

Carbol Fuschin > Crystal Violet > Decolorizer > Methylene Blue

155. Which of the following compounds are needed for nucleic acid synthesis?…….. Sulfur and phosphorus

156. Which of the following is anoxygenic?…….. Rhodopseudomonas

157. Three domain classification was proposed by the…….. **C**arl woese

158. Removal and gain of electrons from an atom is known as……Redox reactions

159. Which of the following stain is used as simple stain?…….. Methylene Blue

160. Which of the following is acidophile?…….. Both molds& yeast

161. What are the physical requirements of bacteria?……All of the given option

162. Microorganisms that have high nutritional requirements are known as …….. None of the given options

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163. Which of the following compounds are needed for protein synthesis…… Nitrogen and Sulfur

164. Eyepiece is also known as…… Ocular Lens

165. Which of the following formed inside bacterium?..... Endospore

166. Anthrax is caused by ..... Bacillus anthracis

167. Phosphate ions……..ATP

168. Which of the following is not a bacterial gene transfer method?..... Transfection

169. Which of the following is used for gene mapping?..... Conjugation

170. Which of the following is relevant to respiration of glucose?...**A**ll of the given options

171. Removing microbes from a limited area is known as..... Degerming

172. Are live mostly in extrema conditions?..... Archea

173. Which of the following staining technique is used as differential staining?..... Gram Staining

174. Biological oxidations involve the loss of hydrogen atoms, they are also called ..... reactions…… Oxidation

175. Pasteur found the ____ that fermented sugar to alcohol……..Yeast

176. Besides water, is the most important requirement for microbial growth…… Carbon

177. Specialized resting cells are known as…… Endospores

178. Organism are classified into ..... kingdom in latest classification……5

179. Cold loving bacteria are known as …… Psychrophiles

180. Which of the following is used to maintain the desired pH?.....Buffers

181. Eukaryotes have distinct _____as point of difference to the prokaryotes…… Nucleus

182. Who is first to publish the extensive and accurate observations of microbes?..... Antony van Leeuwenhoek

183. Which of the following is the reason for changes in the classification?..... All of the given options

184. Which of the following is the dye for positive staining?..... All of the given options

185. Which of the following is the dye for negative staining?..... Eosin

186. The theory of spontaneous generation was proposed by……Aristotle

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187. The cell wall of bacteria is mostly made up of…… Peptidoglycan

188. For smear formation we use:…… Platinum loop

189. The study of immune system is known as…… Immunology

190. Which of the following is used for microbial control through chemicals?..... Aldehydes

191. _____ is very basic analytical technique that is used to separate solid insoluble particles from liquid…… Filtration

192. An extra chromosomal circular DNA fragment is Known as…… Plasmid

193. For which power of lens, we use oil……100X

194. Antigen _ Antibody reaction is known as…… Agglutination

195. Who discovered the first vaccine?..... Edward Jenner

196. Which of the following is the illumination source for fluorescent microscope?..... Both Fluorochromes & UV light

197. Oxidation of glucose to pyruvic acid with the production of some ATP and energy-containing NADH is known as……Glycolysis

198. Microscopy that is required for unstained specimens is known as …… **Darkfield Microscopy**

199. NADH and FADH2 are oxidized during…… Electron transport chain

200. Mycology is branch of biological science which deals with the study of …… Fungi

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