1. **Thermal death time is**
2. Time required to kill all cells at a given temperature
3. **Temperature that kills all cells in a given time**
4. Time and temperature needed to kill all cells
5. All of the above
6. **Elek’s gel diffusion test is used for the detection of**
7. Tetani toxin
8. Cholera toxin
9. **Diophtheria toxin**
10. Toxoid
11. **Temperature required for pasteurization is**
12. Above 150oC
13. **Below 100oC**
14. 110oC
15. None of these
16. **Separation of a single bacterial colony is called**
17. **Isolation**
18. Separation
19. Pure culturing
20. All of these
21. **Which of the following is ionizing radiation?**
22. U.V. rays
23. IR
24. **γ-rays**
25. None of these
26. **Which of the following induces dimerisation of thymine?**
27. X-rays
28. **U.V. rays**
29. ã-rays
30. None of these
31. **When food material are preserved at a temperature just above freezing temperature, the process is called.**
32. Freezing
33. Pasteurisation
34. **Chilling**
35. Frosting
36. **Which of the following method of sterilization has no effect on spores?**
37. **Drying**
38. Hot air oven
39. Autoclave
40. None of these
41. **Treponema pallidum can be best indentified using**
42. Fluorescence microscope
43. **Bright field microscope**
44. Dark field microscope
45. Flourescence microscope
46. **Autoclaving is carried at**
47. Dry heat
48. Atmospheric pressure
49. **120oC**
50. All of these
51. **Temperature in pasteurization is**
52. **62.8oC**
53. 35.7oC
54. 68.2oC
55. 60.8oC
56. **The bacterial culture prepared by pure culture method is**
57. **Inoculum**
58. Suspension
59. Dilution
60. None of these
61. **Algae are rich in**
62. Carbohydrates
63. Proteins
64. Vitamins
65. **All of these**
66. **L-Lysine is produced from**
67. **Corynebacterium glutamicum**
68. Clostridium botulinum
69. Mycobacterium sps
70. Pseudomonas
71. **The orderly increase in the quantity of all of the cellular components is known as**
72. Reproduction
73. **Growth**
74. Binary fission
75. None of these
76. **Theobacillus thio oxidans grow at pH**

a) 7.0

b) 1.0

c) 6.0

d) 9.5

1. **Slow freezing requires the conditions**
2. 0oC to 15oC for 15 min.
3. – 6 oC to – 10oC for 10 min.
4. **– 15oC to 3 to 72 hrs.**
5. None of these
6. **Discontinuous heating is called**
7. Pasteurization
8. Sterilization
9. Fermentation
10. **Tindalisation**
11. **Isolation is**
12. Purification of culture
13. Introduction of inoculum
14. **Separation of a single colony**
15. To grow microorganisms on surfaces
16. **The condition required for autoclave**
17. 121oC temp.and 15 lbs. pressure for 20 min.
18. 120oC temp.and 20 lbs. pressure for 30 min
19. **150oC temp.for 1 hr.**
20. 130oC temp for 2 hr.
21. **Lysozyme is effective against**
22. Gram negative bacteria
23. **Gram positive bacteria**
24. Protozoa
25. Helminthes
26. **Blood agar medium is**
27. Enrichment medium
28. **Enriched medium**
29. Selective medium
30. Differential medium
31. **Infrared radiation is a method of sterilization by**
32. Dry heat
33. Moist heat
34. Chemical method
35. **Mechanical method**
36. **Lyophilization means**
37. Sterilization
38. **Freeze-drying**
39. Burning to ashes
40. Exposure to formation
41. **Temperature used for hot air oven is**
42. 100oC for 1 hour
43. 120oC for 1 hour
44. **160oC for 1 hour**
45. 60oC for 1 hour
46. **Phenol co-efficient indicates**
47. **Efficiency of a disinfectant**
48. Dilution of a disinfectant
49. Purity of a disinfectant
50. Quantity of a disinfectant
51. **Agar is obtained form**
52. Brown algae
53. **Red algae**
54. Green algae
55. Blue-green algae
56. **Enhancement of virulence in bacteria is known as**
57. Pathogenicity
58. Attenuation
59. **Exaltation**
60. Toxigenicity
61. **Spores are killed by**
62. 70% alcohol
63. Glutaraldehyde
64. Autoclaving
65. **Both b and c**
66. **Glassware are sterilized by**
67. Autoclaving
68. **Hot air over**
69. Incineration
70. None of these
71. **Tyndallisation was proposed by**
72. **Tyndall**
73. Pasteur
74. Koch
75. Jenner
76. **The following organisms have been proposed as sources of single cell protein**
77. Bacteria
78. Yeasts
79. Algae

d. All the three

1. **Nitrites are oxidized to nitrates by a microorganism**
2. Nitrosomonas
3. Nitrosococcus
4. **Nitrobacter**
5. Azatobacter
6. **The major constituents in agar are**
7. Fats
8. Aminoacids
9. **Polysaccharides**
10. Polypeptides
11. **The first phase of a growth curve is**
12. Log phase
13. **Lag phase**
14. γ phase
15. Both a and b
16. **Which one of the following mineral elements play an important role in biological nitrogen fixation**
17. Copper
18. Magnesium
19. Zinc
20. **Molybdenum**
21. **Rapid bacterial growth phase is known as**
22. **Log**
23. Lag
24. Lack
25. None of these
26. **The ion that is required in trace amounts for the growth of bacteria is**
27. Calcium
28. Magnesium
29. **Cobalt**
30. Sodium
31. **The most important vitamin for the growth of bacteria is**
32. **B-complex**
33. Vitamin A
34. Vitamin D
35. Vitamin C
36. **Sulphur can be utilized by bacteria in the form of**
37. **Organic compounds**
38. Inorganic compounds
39. Elemental compounds
40. All of the above
41. **Phosphorous is an essential component of**
42. Nucleotides
43. Nucleic acids
44. Phospholipids and Heichoic acids
45. **All the above**
46. **Trace elements are**
47. Zn+2, Cu+2, Mn+2
48. MO6+, Ni2+, B3+ and CO2+
49. **Both a and b**
50. **None of these**
51. **Most bacteria do not require the ion**
52. Mg2+
53. Ca2+
54. **Na+**
55. Fe+2
56. **The no. of generations per hour in a bacteria is**
57. Growth rate
58. **Generation time**
59. Sigmoid curve
60. None of these
61. **Log-phase is also known as**
62. Death phase
63. Exponential phase
64. **Lag-phase**
65. None
66. **Crossing-over most commonly occurs during**
67. **Prophase** I
68. Prophase II
69. Anaphase I
70. Telophase II
71. **DNA-replication is by the mechanism of**
72. Conservative
73. **Semiconservative**
74. Dispersive
75. None of the above
76. **Production of RNA from DNA is called**
77. Translation
78. RNA splicing
79. **Transcription**
80. Transposition
81. **Nucleic acids contain**
82. Alanine
83. **Adenine**
84. Lysine
85. Arginine
86. **The distance between each turn in the helical strand of DNA is**
87. 20 Ao
88. **34 Ao**
89. 28 Ao
90. 42 Ao
91. **Self-replicating, small circular DNA molecules present in bacterial cell are known**
92. **Plasmids**
93. Cosmids
94. Plasmomeros
95. plastids
96. **Western blotting is the technique used in the determination of**
97. RNA
98. **DNA**
99. Proteins
100. All of these
101. **m RNA synthesis from DNA is termed**
102. **Transcription**
103. Transformation
104. Translation
105. Replication
106. **Penicilin is commercially produced by**
107. P.notatum
108. **P.chrysogenum**
109. P.citrinum
110. P.roquefortii
111. **The most commonly used microorganism in alchohol fermentation is**
112. **A spergilus niger**
113. Bacillus subtilis
114. Sacharomyces cerevisiae
115. Escherichia coli
116. **Vitamin B12 can be estimated and determined by using organism**
117. Lactobacillus sps
118. **Lactobacillus Leichmanni**
119. Bacillus subtilis
120. E.Coli
121. **Batch fermentation is also called**
122. **Closed system**
123. Open system
124. Fed-Batch system
125. Sub-merger system
126. **The micro-organism useful for fermentation are**
127. Bacteria
128. **Yeast**
129. Fungi
130. None of these
131. **Industrial microbiology, mainly depends on the phenomenon**
132. Pasteurisation
133. **Fermentation**
134. Vaccination
135. Both b and c
136. **Thermo resistant bacteria are important in the preservation of foods by**
137. Freezing
138. **Canning**
139. Chemicals
140. Irradiation
141. **The fungus used in the industrial production of citric acid:**
142. Rhizopus Oryzac
143. Fusarium moniliformae
144. Rhizopus nigricans
145. **Aspergillus nigricans**
146. **Submerged fermentations are**
147. Batch fermentation
148. Continuous fermentation
149. **Both a and b**
150. None of these
151. **Batch fermentation is also called**
152. **Closed system**
153. Open system
154. Fed-batch system
155. None of these
156. **Microorganisms used for alcohol production**
157. **Saccharomyces sereviceae**
158. Bacillus subtilis
159. Penicillium chrysogenum
160. None of these
161. **The raw material for citric acid production is**
162. **Corn**
163. Molasses
164. Starch
165. None of these
166. **Aspergillus niger is used generally for the production of**
167. Ethanol
168. Penicillin
169. **Citric acid**
170. Lactic acid
171. **How much time a bacterium take for the complete duplication?**
172. 30 min.
173. 10 min.
174. **20 min.**
175. 25 min.
176. **The generation time is**
177. The time required for the cell to divide
178. The total division of the cell during its life time
179. **The total no.of cells formed**
180. None of these
181. **In the synthesis of cell components the major element required is**
182. Nitrogen
183. Sulphur
184. **Carbon**
185. Oxygen
186. **For the formation of cell-components the elements required are**
187. Nitrogen
188. Oxygen