

BIOLOGY

BOOKS - TRUEMAN BIOLOGY

KINGDOM MONERA - KINGDOM OF PROKARYOTES

Multiple Choice Question

1. Which is wall -less and smallest living cell

- A. Algae
- B. Bacteriophage
- C. Cyanobacteria
- D. Mycoplasma

Answer: D



Watch Video Solution

2. During Gram's stain

A. all bacteria whether Gram (+) ve or (-) ve, take crystal violet stain.

B. only Gram+ ve bacteria take crystal violet stain.

C. only Gram -ve bacteria take crystal violet stain.

D. Gram (+)ve bacteria lose this stain after alcohol treatment and take red stain of safranin

Answer: A

- 3. Which group includes decomposers?
 - A. Monera and Animalia
 - B. Monera and Fungi
 - C. Plantae and Fungi
 - D. Monera and Protista

Answer: B



4. A chain of spherical bacteria is called streptococci. When spherical cocci are found in grape like irregular aggregates, they are called

A. staphylococci

B. sarcina

C. palisade

D. streptobacilli

Answer: A

5. When a spiral bacterium has only one curve and is comma like, it is called

A. spirillum

B. vibrio

C. baciliius

D. spirochaete

Answer: B



6. Bacteria that have organic molecules for energy and as a source of carbon are known as

A. chemoheterotrophs

B. photoautotrophs

C. photoheterotrophs

D. chemoautotrophs

Answer: A



7. Under optimum condition Bacterial cells divide once in 20 minutes by binary fission. How many bacteria will be produced in 2 hours with same rate of division?

A. 8

B. 32

C. 128

D. 64

Answer: D

8. Which one of the following has the potential to be an important source of protein because it has 10 times higher yield than wheat?

- A. Spirogyra
- B. Nostoc
- C. Rhodospirillum
- D. Spirulina

Answer: D



Watch Video Solution

9. Bacterial conversion of organic nltrogenous or protein matter into ammonium compounds is called

A. denitrification

B. nitrification

C. ammonification

D. nitrogen fixation

Answer: C



Watch Video Solution

10. The genetic material (Genome) or DNA in prokaryotes / bacterial E.coli and cyanobacteria occurs as

- A. one ds, tree circular DNA with histones
- B. one ds, circular DNA without histones
- C. histones with one linear ds DNA
- D. Linear ss, one DNA without histones

Answer: B



Watch Video Solution

11. The main difference between Gram positive and Gram negative bacteria lies in the composition of

A. cell wall

B. pili

C. flagella

D. plasmids



Watch Video Solution

12. Bacteria continue to live under conditions which resemble the conditions that prevailed on primitive earth, are

A. PPLO

- B. Archaebacteria
- C. Cyanobacteria
- D. Chlamydia

Answer: B



Watch Video Solution

13. Thermoacidophiles are facultative anaerobic archaebacteira and can tolerate high temperature ($80^{\circ}\,C$) and high acidity (pH) due to

- A. branched chain lipids in cell membrane
- B. high KCI cone. and resistant enzymes
- C. mucilage covering

D. all of the above.

Answer: D



Watch Video Solution

14. Organisms found in extreme temperatures are

- A. Eubacteria
- B. Archaebacteria
- C. Fungi

D. Mycoplasma

Answer: B



Watch Video Solution

15. The uniqueness in Archaebacteria is the presence of

A. peptidoglycan rich cell wall

B. ether linked long branched alcohols bound to glycerol

C. both statements are correct.

D. nuclear membrane

Answer: B



Watch Video Solution

16. The archaebacteria occurring in marshes, swamps, rumens of cattles, gobar gas plants are

A. methanogens

- B. ammonifying bacteria
- C. thermoacidophiles
- D. denitrifying bacteria



Watch Video Solution

17. A symbiotic nitrogen fixing moneran among the following is

A. Nitrocystis

- B. Anabaena
- C. Nitrobacter
- D. Escherichia

Answer: B



- **18.** From where you will collect E. coli?
 - A. Human excreta
 - B. On leaves

- C. Water
- D. Human stomach



- 19. Gram (-) ve bacteria in Gram stain appears
 - A. red
 - **B.** Colourless
 - C. blue

D. orange

Answer: C



Watch Video Solution

20. In bacteria, alternation of generations is absent because of the absence of

- A. nucleus and chromosomes
- B. DNA and histone
- C. syngamy and meiosis

D. equational division

Answer: C



Watch Video Solution

21. Endospores are thick walled, dehydrated cells formed in scarcity of nutrients. These are formed in

A. Bacillus and Clostridium

B. Bacillus and Mucor

C. Clostridium and Saccharomyces

D. E. coli and Bacillus

Answer: A



Watch Video Solution

22. Curing of tea and tobacco leaves is done to develop flavour and remove bitterness. It is due to the

A. activity of certain bacteria

- B. activity of certain cyanobacteria
- C. acitivity of mycoplasma
- D. acitivity of rickettsiae



Watch Video Solution

23. On the basis of shape and staining Escherichia coli is

A. Bacillus, Gram (-)ve

- B. Coccus, Gram (-)ve
- C. Spirillum, Gram (+)ve
- D. Vibrio, Gram (+)ve



Watch Video Solution

24. Pili/fimbriae are surface appendages that help in

A. attachment

- B. transduction
- C. locomotion
- D. all of these



Watch Video Solution

25. Mesosomes in bacteria are considered equivalent to mitochondria. What is correct for mesosomes ?

A. They contain respiratory enzymes like cytochrome oxidase and dehydrogenase

B. They are infoldings of cell membrane to increase surface area

C. They are attached to nucleoid to provide energy during binary fission, and help in nucleoid separation and septa formation

Answer: D



/atch Video Solution

D. All of the above.

26. Bacterial cell divides in every minute it takes one hour to fill up a cup. How much time be taken to fill half the cup

- A. 60 minutes
- B. 59 minutes
- C. 30 minutes
- D. 29 minutes

Answer: B



27. Bacteria multiply mainly by

A. transverse binary fission

B. longitudinal binary fission

C. oidia

D. conjugation

Answer: A



28. Endospores actualy help in

A. transformation

B. dispersal and perennation

C. variations

D. all of the above.

Answer: B



- A. anaerobic breakdown of carbohydrates
- B. anaerobic breakdown of proteins with foul odour chiefly sulphur compounds
- C. aerobic breakdown of proteins with foul odour chiefly sulphur compounds
- D. anaerobic breakdown of fats.

Answer: B



30. Nitrosomonas and Nitrococcus oxidise

- A. Nitrate to nitrogen
- B. CO_2 to carbohydrates
- $\mathsf{C}.\,N_2$ to NO_3
- D. NH_3 to nitrite

Answer: D



31. Beggiatoa oxidises

A. H_2S to S

B. SO_4 to S

C. both correct

D. $Fe^{++}
ightarrow Fe^{+++}$

Answer: A



32. Decay by bacteria is

A. aerobic breakdown of any organic matter

B. aerobic breakdown of inorganic matter

C. anaerobic breakdown of organic matter

with foul odour

D. aerobic breakdown of proteins.

Answer: A



33. Which of the following processes is fthe source of energy in chemoautotrophs for ixation of CO_2 into carbohydrates ?

- A. Oxidation of inorganic molecules
- B. Oxidation of organic molecules
- C. Reduction of organic molecules
- D. Reduction/oxidation of any matter present in medium.

Answer: A

34. Bacterial nitrogen fixation by nitrogen fixing bacteria is

$$N = N$$
 into NO_3

$$N=N \;\; {
m into} \;\; NH_3$$

$$NO^2$$
 ^ $($ $)$ into NO^3 ^ $-$

D. use of nitrogen rich compounds by plants.

Answer: B



Watch Video Solution

35. Anoxygenic photoautotroph requires

- A. $O_2,\,H_2O$ & light
- B. CO_2 and H_2O
- $C. CO_2$ and light

 $D. CO_2$, light, H_2S

Answer: D



Watch Video Solution

36. Prokaryotic and eukaryotic flagella differ in

A. eukaryotic flagella are made up of Tu

bulin protein show ATPase activity, and

show 2 + 9 organisation while bacterial

- flagella are made up of flagellin protein and show 9+0 arrangement
- B. eukaryotic flagella beat back and forth like oars whi le bacterial flagella rotate around their bases like propellers.
- C. prokaryotic flagella are outward extensions of the cell's interior while eukaryotic flagella are independent structures attached to the cell 's surface.
- D. all the statements are correct.

Answer: B



Watch Video Solution

37. The joker of plant kingdom are

A. Bacteria

B. Archaebacteria

C. PPLO

D. Viriods

Answer: C

38. Smallest organism capable of autonomous growth and reproduction is

A. Virus

B. Bacteria

C. Mycoplasma

D. Bacteriophage

Answer: C



Watch Video Solution

39. Facultative anaerobic bacteria are

A. strictly anaerobes

B. anaerobes but can live aerobically

C. aerobes but can live anaerobically also

D. no one is correct

Answer: C



40. Which is must for nitrogen fixation by symbiotic bacteria in root nodules?

- A. Phycocyanin
- **B.** Carotenoids
- C. Leghaemoglobin
- D. Bacteria viridin

Answer: C



41. In blue green algal cell, the photosynthetic pigments are found

A. in the chromatophores

B. distributed freely in the peripheral part

of cytoplasm

C. attached to thylakoid membranes of

chloroplast

D. in the membranes of thylakoids present

freely in the cytoplasm

Answer: D

42. In blue green algae, attached to the freely lying thylakoids are present small granules containing photosynthetic pigments. These granules are called

A. phycobilisomes

B. poly eta-hydroxybutyric acid (PBH)

C. plastids

granules

D. chloroplast

Answer: A



Watch Video Solution

43. Azolla is used as biofertilizer because

A. its leaves contain nitrogen fixing

cyanobacterium Anabaena

B. its leaves are rich in urea

C. it stimulates growth of seedlings of Rice

D. It activates embryo for quick germination

Answer: A



Watch Video Solution

44. Nostoc is known to do

A. photosynthesis

B. photosynthesis and N_2 fixation

simultaneously

C. N_2 fixation only

D. either photosynthesis or N_2 fixation at a time

Answer: B



Watch Video Solution

45. Nitrogenase is found in Nostoc in the

A. phycobilisome

B. akinete

- C. heterocyst
- D. both (1) & (3)

Answer: C



Watch Video Solution

46. Cyanobacteria are characterised by

A. ability to do oxygenic photosynthesis and absence of phycobilins

- B. ability to perform oxygenic photosynthesis and presence of phycobilins
- C. presence of chlorophyll in chloroplast
- D. ability to do anoxygenic photosynthesis and presence of nitrogenase

Answer: B



47. Nitrosomonas is a

A. chemolithotroph

B. chemoheterotroph

C. autotroph

D. heterotroph

Answer: A



48. Photosynthetic pigments of bacteria are located in

- A. thylakoids
- B. leucoplast
- C. chromoplast
- D. chloroplast

Answer: A



49. In photoautotrophic bacteria, the reaction centre is

- A. P_{700}
- B. B_{690}
- $\mathsf{C}.\,B_{890}$
- D. B_{1700}

Answer: C



50. The hydrogen donor in bacterial photosynthesis is usually

- A. H_2O
- B. H_2S
- $\mathsf{C}.\,NH_3$
- D. HNO_3

Answer: B



51. Peptidoglycan (Murein) and amino acids in cell wall are found in

- A. Archaebacteria and Eukaryotes
- B. Eubacteria and Protista
- C. Monera and Protista
- D. Bacteria and cyanobacteria

Answer: D



52. A unique amino acid in the cell wall of Bacteria and BGA is

- A. alanine
- B. glutamine
- C. aspartate
- D. diaminopimelic acid

Answer: D



53. The bacteria which do not retain the crystal violet of iodine stain when after washing with alcohol are included in

- A. Gram negative
- B. Gram neutral
- C. Grame positive
- D. AF +ve

Answer: A



54. A bacterium divides every 35 minutes. If a culture containing 10^5 cells per ml is grown for 175 minutes, what will be the cell concentration per ml after 175 mts?

A.
$$32 imes 10^5$$
 cells

B.
$$5 imes 10^5$$
 cells

C.
$$35 imes 10^5$$
 cells

D.
$$4.175 imes 10^5$$

Answer: A



55. Which of the following uses light as energy source ?

A. Rhodopseudomonas

B. Nitrococcus

C. Nitrosomonas

D. Clostridium

Answer: A



56. A pigment due to which root nodules of leguminous plants are pinkish, is

- A. phycoerythrin
- B. bacteriochlorophyll
- C. bacterioviridin
- D. leghaemoglobin

Answer: D



57. Some bacteria are not easily killed because of

A. chitinous cell wall

B. mesosomes

C. virulent nature and capsulated wall

D. capsule and endospore formation

Answer: D



58. Without the rotation of crop by a pulse in between cereals, the farmer observed the increases in natural fertility due to

- A. Rhizobium
- B. Azotobacter
- C. Acetobacter
- D. Clostridium

Answer: B



59. In order to increase the yield of the cereal crops the farmer rotated the crop with pulses.

The increase in yield occurred due to the action of

A. Clostridium butylicum

B. Bacillus denitrificans

C. Rhizobium leguminosarum

D. Nitrosomonas

Answer: C



60. The bacterial flagellum has

A. a basal granule

B. a hook

C. a main filament

D. all of these

Answer: D



61. Bacterial plasmids contain only DNA which is

A. circular, ds

B. cricular, ss

C. linear, ds

D. linear, ss

Answer: A



62. Conjugation/sexuality in Bacteria was discovered by

- A. Lederberg and Tatum
- B. Zinder and Lederberg
- C. Hershey and Chase
- D. Meselson and Stahl

Answer: A



63. A term not associated with genetic recombination in bacteria is

- A. conjugation
- B. translation
- C. transduction
- D. transformation

Answer: B



64. The phenomenon of transduction was discovered by

- A. Zinder and Lederberg
- B. Lederberg and Tatum
- C. Jacob and Wollman
- D. Griffith

Answer: A



65. Episomes are

- A. extranuclear part of Bacteria
- B. toxins producing bodies
- C. extranuclear components with least no.

of genes

D. plasmids with ability to intergrate with

bacterial chromosome

Answer: D



66. Which one of the following pairs is wrongly matched

A. Streptomycetes Antibiotic

B. Methanogens Gobar gas

C. Yeast Ethanol

D. Coliforms Vinegar

Answer: D



67. What	are	the	sex	organs	provided	in	some
hacteria i	2						

- A. circular DNA
- B. plasmid
- C. sex pili
- D. gametes/F factor

Answer: C



68. A bacterial genome refers to the total number of genes located on

A. single chromosome

B. haploid set of chromosomes

C. diploid set of chromosomes

D. plasmids

Answer: A



69. A process by which a part of genetic material separated from a broken cell is transferred to another cell is known as

- A. lysogeny
- B. transduction
- C. transformation
- D. conjugation

Answer: C



70. Bacteria reproduce sexually by

- A. endospore
- B. conidia
- C. binary fission
- D. transformation

Answer: D



71. The bacteria which can trap solar energy for synthesizing ATP but can not utilize it for making food are

- A. thermophiles
- B. thermoacidophiles
- C. methanogens
- D. halophiles

Answer: D



72. Bacteria that get their energy by fermentation and for whom oxygen is lethal are called

- A. obligate anaerobes
- B. obligate aerobes
- C. facultative aerobes
- D. facultative anaerobes

Answer: A



73. The bacteria that grow best at the temperature ranging from 45° to $65^{\circ}C$ are called

- A. psychrophils
- B. mesophiles
- C. thermophiles
- D. halophiles

Answer: C



74. Chemolithotrophs make use of

A. organic compounds as a source of carbon

B. CO_2 as a source of carbon

C. bacteriochlorophyll

D. bacterioviridin

Answer: B



75. Name the organisms which do not derive energy directly/indirectly from sun.

- A. Chemosynthetic bacteria
- B. Symbiotic bacteria
- C. Pathogenic bacteria
- D. Moulds

Answer: A



76. What is true for photolithotrophs?

A. Obtain energy from radiations and H_2 from organic compounds.

B. Obtain energy from radiations and H_2 from inorganic compounds.

C. Obtain energy from organic compounds

D. Obtain H_2 from organic compounds

Answer: B



77. A specialized pale cell in blue green algae which is impermeable to oxygen is

A. akinete

B. hormogonia

C. heterocyst

D. spore

Answer: C



78. Blue green algae contain phycobilin. Which one is blue in colour ?

- A. Phycocyanin
- B. Phycoerythrin
- C. Phycocolloid
- D. none of the above

Answer: 4



79. Blue green algae do not have flagella or cilia but they have the capacity to move. How is this function performed ?

- A. By means of musculature
- B. By rotation and gliding
- C. By means of fimbria
- D. By means of special organs

Answer: B



80. Vegetatively the members of cyanophyceae multiply by

- A. akinetes
- B. fragmentation
- C. formation of horomogonia
- D. all of the above

Answer: D



81. Barophillic prokaryotes

A. grow slowly at high altitudes in frozen lakes

B. found in water rich in Ba $\left(OH\right)_2$

C. grow and divide in very deep marine sediments

D. found in marine, Barium salt rich water

Answer: C



82. Nuclear material without nuclear membrane is observed in

- A. bacteria and mycoplasma
- B. bacteria and algae
- C. bacteria and slime moulds
- D. mycoplasma and algae

Answer: A



83. Pleuro-pneumonia like organisms are grouped under

A. prokaryotes

B. eukaryotes

C. fungi

D. viruses

Answer: A



84. Mycoplasma are not viruses in nature because

A. these contain both DNA and RNA in the same cell

B. these can not be grown artificially in cultures also

C. they are not sensitive to antibiotics

D. all of the above

Answer: A



85. The smallest organisms without any specific shape and cell wall, which cause diseases among plants are

A. chlamydia

B. fungi

C. mycoplasma

D. bacteria

Answer: C

Watch Video Solution

86. Mycoplasma is the causative agent for one of the following diseases

A. Vein yellowing

B. Pneumonia

C. Dengue

D. Tobacco mosaic

Answer: B



87. A Bacterium living as commensal in humans in colon (large intestine) and synthesizing vitamin K and B_{12} there, is

- A. Vibrio cholerae
- B. Bacillus anthracis
- C. Escherichia coli
- D. Entamoeba coli

Answer: C



88. Botulism caused by Clostridium botulinum affects

A. lymph glands

B. intestine

C. neuromuscular junction

D. spleen

Answer: C



89. Penicillin inhibits bacterial multiplication because it checks

A. spindle formation

B. cell wall synthesis of bacteria

C. RNA synthesis

D. it destroys chromatin

Answer: B



90. A compound which is produced by an organism and inhibits the growth of other organism is called

A. antiseptic

B. antibiotic

C. disinfectant

D. antiallergic

Answer: B



91. Bacteria cannot survive in a highly salted pickle because

A. they don't get enough light for photosynthesis

B. salt inhibits reproduction of bacteria

C. bacteria get plasmolysed and killed

D. pickle does not contain nutrients for bac-teria to live

Answer: C

92. Rickettsiae are said to be connecting link between

A. Virus and bacteria

B. Bacteria and fungi

C. Bacteria and PPLO

D. Mycoplasma and viruses

Answer: A



93. Obligate intracellular parasites other than virus are

- A. Rickettsiae
- B. Azotobacter
- C. Azospirillum
- D. Mycoplasma

Answer: A



94. The link between bacteria and fungi is

- A. Chlamydia
- **B.** Actinomycetes
- C. Rickettsias
- D. Myxophyceae

Answer: B



95. What is false about plasmids?

A. It is must for normal life of bacterium

B. It confers property of drug resistance

C. It confers property of toxigenicity

D. It endows the host with ability to conjugate

Answer: A



96. In cyanobacteria, reproduction is

A. asexual and vegetative

B. asexual and sexual

C. vegetative and sexual

D. sexual only

Answer: A



Watch Video Solution

97. Ray fungi are

- A. actinomycetes
- B. fungi
- C. mycoplasma
- D. archaebacteria

Answer: A



Watch Video Solution

98. Chlorophyll a is absent in which of the following photosynthetic organism

- A. Bacteria
- B. Cyanobacteria
- C. Red algae
- D. None of these

that causes botulism is

Answer: A



Watch Video Solution

99. The bacterium (Clostridium botulinum)

A. a. facultative aerobe

B. an obligate aerobe

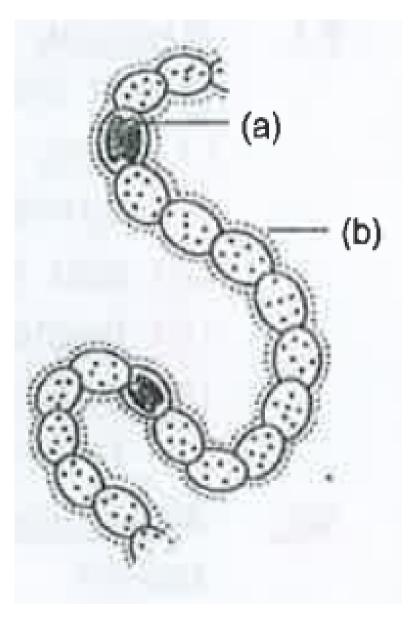
C. a facultative anaerobe

D. an obligate anaerobe

Answer: D



100. What is shown in the figure



A. a - Heterocyst, Mucilage sheath

B. a - Akinete, b-Fila- ment

C. a-akinete, b-Hormogonia

D. a - akinete, b-Trichome

Answer: A



Watch Video Solution

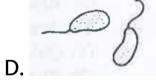
101. A. In the figure, which is the coccus form of bacteria





В.





Answer: B



102. Many blue green algae occur in thermal spring (hot water spring). The temperature tolerance of these algae have been attributed to their

A. Cell wall structure

B. Importance of homopolar bonds in their proteins

C. Mitochondrial structure

D. Branched chain lipids in the cell

membranes

Answer: D



Watch Video Solution

103. Go through the following statements carefully

Compared to many other organisms, bacteria as a group show the most ex- tensive metabolic diversity.

Mycoplasma die in the absce of oxy- gen

Cyanobacteria often form blooms in polluted water bodies.

No pathogenic mycoplasma have been reported so far

Which of these are correct?

A. (i), (ii) and (iii)

B. (i), (iii)

C. (ii), (iii) and (iv)

D. (iii) & (iv)

Answer: B



104. Mention the role of mesosomes in bacteria.



Watch Video Solution

105. Select the wrong statement

A. Red sea is named after the colouration provided by blue green algae Trichodes-miumerythraeum

B. Spirullina has a spirally coiled filament

C. Peptidoglycan is the main component of

the archaebacterial cell wall

D. All of the above

Answer: C



Watch Video Solution

106. A bacterial cell contains

A. Mesosome, Golgi bodies and nucleoid

B. Mesosome and sap vacoule

- C. Mesosome, nucleoid _and thylakoids
- D. Lysosome, nucleoid and inclusion bodies

Answer: C



Watch Video Solution

107. Which of the following are true of archaebacteria?

Presence of peptidoglycan cell wall

Strict aerobes

First amino acid in protein synthesis is

methionine

Includes methanogens.

- A. 1,2 and 3
- B. 3 and 4
- C. 1, 3 and 4
- D. 1, 2, 3 and 4

Answer: B



108. Match List-I with List-II and select the correct answer using the codes given below the lists

	List-I	List-II
A	Nitrogen fixation	Conversion of NH ₄ ⁺ into nitrite and nitrate
B.	Denitrification	2. Conversion of nitrite or nitrate into atmospheric nitrogen.
C.	Nitrification	3. Conversion of atmospheric nitrogen into ammonia.
D.	Ammonification	Conversion of organic nitrogen into ammonia



Watch Video Solution

109. Which one of the following is associated with denitrification?

A. Rhizobium

- B. Thiobacillus
- C. Clostridium
- D. Azotobacter

Answer: B



Watch Video Solution

110. Which one of the following bacteria is not connected with nitrogen fixation?

A. Azotobacter

- B. Nitrosomonas
- C. Frankia
- D. Rhizobium

Answer: B



Watch Video Solution

111. Bacteria and blue-green algae are similar due to the

A. Presence of mitochondria

- B. Chemosynthetic mode of nutrition
- C. Presence of flagella
- D. Presence of nucleoid

Answer: D



Watch Video Solution

112. Which of the following is NOT found in all bacterial cells?

A. cell membrane

- B. nucleoid
- C. ribosomes
- D. capsule

Answer: D



Watch Video Solution

113. Which of the following structures frequently serves as densely packed reserve for material and energy in a bacterial cell

- A. flagella
- B. plasmid
- C. inclusion
- D. fimbriae

Answer: C



- 114. Read the following matches
- (i) Bacillus vulgaris Ammonifying
- (ii) Nitrobacter-Soil bacteria

(iii) Pseudomonas- Nitrate Bacteria(iv) Vibrio cholerae bacteria - Nitrogen fixingbacteria - Retting of fibres - Obligate anaerobeWhich of these are correct?

- A. (i), (ii) & (iii)
- B. (ii) & (iii)
- C. (i) & (iv)
- D. (i) & (iii)

Answer: D



- 115. Read the following matches
- (i) Clostridium Food poisoning botulin um
- (ii) Xanthomona- sesculenti
- (iii) Nitrosomonas Bacterial blight of rice -
- Oxidises ammonia to nitrites
 - A. (i), (iii) & (iv)
 - B. (ii), (iii) & (iv)
 - C. (i) & (iii)
 - D. All are correct



Watch Video Solution

116. Oxygenic photosynthesis occurs in

A. Rhodospirillum

B. Chlorobium

C. Chromatium

D. Oscillatoria

Answer: D

117. Cyanobacteria refer to

- A. Autotrophic prokaryotes with characteristic bluegreen algae
- B. Bacteria infecting the cyanophycean algae
- C. Viruses infecting bluegreen alagae
- D. Cynophycean members infecting
 - bacteria



- **118.** Select the correct combination of the statements (i-iv) regarding the characteristics of certain organisms.
- (i) Methanogens are archaebacteria which produce methane in marshy areas
- (ii) Nostoc is a filamentous blue-green alga which fixes atmospheric nitrogen
- (iii) Chemosnthetic autotrophic bacteria

synthesise cellulose from glucose
(iv) Mycoplasma lack a cell wall and can survive

The correct statements are

A. (ii), (iii)

without oxygen

B. (i), (ii), (iii)

C. (ii), (iii), (iv)

D. (i), (ii), (iv)

Answer: D



119. Some hyperthermophilic organisms that grow in highly acidic (pH2) habitats belong to the two groups

- A. Liverworts and yeasts
- B. Eubacteria and archaea
- C. Cyanobacteria and diatoms
- D. Protists and mosses

Answer: B



120. Membrane bound organelles are absent in

- A. Plasmodium
- B. Saccharomyces
- C. Streptococcus
- D. Chlamydomonas

Answer: C



121. In biogas plant which group of bacteria is found

- A. Cyanobacteria
- B. Myxobacteria
- C. Mycobacteria
- D. Archaebacteria

Answer: D



122. What is true for Mycoplasma?

A. They completely lack cell wall

B. They are the smallest living eels nown

C. They can survive without oxygen

D. All the above

Answer: D



Watch Video Solution

123. What is a genophore

- A. DNA in prokaryotes
- B. DNA and histones in prokaryotes
- C. DNA and protein in prokaryotes
- D. RNA in prokaryotes



Watch Video Solution

124. Which one of the following organisms is not an example of eukaryotic cells

- A. Paramoecium caudatum
- B. Escherichia coli
- C. Euglena viridis
- D. Amoeba proteus

Answer: B



Watch Video Solution

125. In eubacteris, a cellular component that resembles eukaryotic cell is

- A. Plasma membrane
- B. Nucleus
- C. Ribosomes
- D. Cell wall



Watch Video Solution

126. Organisms called Methanogens are most abundant in a

- A. Sulphur rock
- B. Cattle yard
- C. Polluted stream
- D. Hot spring

Answer: B



Watch Video Solution

127. Archaebacteria are special since they live in some of the most harsh habitats such as

- A. Extreme salty areas
- B. Hot springs
- C. Marshy areas
- D. All the above

Answer: D



- 128. Denitrification is carried by bacteria
 - A. Pseudomonas

- **B.** Nitrococcus
- C. Nitrosomonas
- D. Nitrobacter



- 129. The cyanobacteria are also referred to as:-
 - A. Golden algae
 - B. Slime moulds

- C. Blue green algae
- D. Protists

Answer: C



Watch Video Solution

130. Nuclear membrane is absent in

- A. Agaricus
- B. Volvox
- C. Nostoc

D. Penicillium

Answer: C



Watch Video Solution

131. Maximum nutritional diversity is found in the group

- A. Animalia
- B. Monera
- C. Plantae

D. Fungi

Answer: B



Watch Video Solution

132. Which of the following is not a free living

 N_2 - fixing bacterium?

A. Azotobacter

B. Rhizobium

C. Bacillus

D. Rhodospirillum

Answer: B



Watch Video Solution

133. Which of the following are likely to be present in deep sea water?

- A. Blue-green algae
- B. Saprophytic fungi
- C. Archaebacteria

D. Eu bacteria

Answer: C



Watch Video Solution

134. Archaebacteria differ from eubacteria in

- A. Mode of reproduction
- B. Cell membrane structure
- C. Mode of nutrition
- D. Cell shape

Answer: B



Watch Video Solution

135. Anoxygenic photosynthesis is characteristic of

- A. Ulva
- B. Rhodospirillum
- C. Spirogyra
- D. Chlamydomonas

Answer: B



Watch Video Solution

136. Which structures perform the function of mitochondria in bacteria

- A. Mesosomes
- B. Nucleoid
- C. Ribosomes
- D. Cell wall



Watch Video Solution

137. True nucleus is absent in

A. Mucor

B. Vaucheria

C. Volvox

D. Anabaena

Answer: D

138. Which one of the following is not an inclusion body found in prokaryotes?

A. Cyanophycean granule

B. Glycogen granule

C. Polysome

D. Phosphate granule

Answer: C



Watch Video Solution

139. Cell wall is absent in:

A. Aspergillus

B. Funaria

C. Mycoplasma

D. Nostoc

Answer: C



140. The structure that help some bacteria to attach to rocks and host tissues are

- A. rhizoids
- B. fimbriae
- C. mesosomes
- D. holdfast

Answer: B



- **141.** Pick up the wrong statement
 - A. Cell wall is absent in Animalia
 - B. Protista have photosynthetic and heterotrophic modes of nutrition
 - C. Some fungi are edible
 - D. Nuclear membrane is present in Monera

Answer: D



142. Which of the following is not a feature of the plasmids?

- A. Circular structure
- B. Transferable
- C. Single-stranded
- D. Independent replication

Answer: C



143. The primitive prokaryotes responsibel for the production of biogas from the dung of ruminant animals include

- A. Thermoacidophiles
- B. Methanogens
- C. Eubacteria
- D. Halophiles

Answer: B



144. Which one of the following statements is wrong?

A. Golden algae are also called desmids

B. Eubacteria are also called false bac- teria

C. Phycomycetes are also called algal fungi

D. Cyanobacteria are also called bluegreen algae

Answer: B



145. Methanogens belong to

- A. Eubacteria
- B. Archaebacteria
- C. Dinoflagellates
- D. Slime moulds

Answer: B



146. Select the wrong statement

- A. Bacterial cell wall is made up of peptidoglycan
- B. Pili and fimbriae are mainly involved in motility of bacterial cells.
- C. Cyanobacteria lack flagellated cells
- D. Mycoplasma is a wall-les microorganism.

Answer: B



147. The primary producers of the deep-sea hydrothermal vent ecosystem are:

- A. Green algae
- B. Chemosynthetic bacteria
- C. Blue-green algae
- D. Coral reefs

Answer: B



148. Which among the following are the smallest living cells, known without a definite cell wall, pathogenic to plants as well as animals and can survive without oxygen?

A. Bacillus

B. Pseudomonas

C. Mycoplasma

D. Nostoc

Answer: C



149. Which of the following are found in extreme saline conditions

- A. Archaebacteria
- B. Eubacteria
- C. Cyanobacteria
- D. Mycobacteria

Answer: A



150. DNA replication in bacteria occurs

- A. during S phase
- B. within nucleolus
- C. prior to fission
- D. just before transcription

Answer: C



151. Which of the following components provides sticky character to the bacterial cell

- A. Cell wall
- B. Nuclear membrane
- C. Plasma membrane
- D. Glycocalyx

Answer: D



152. Which among the following is not a prokaryote

- A. Oscillatoria
- **B.** Nostoc
- C. Mycobacterium
- D. Saccharomyces

Answer: D

