BIOLOGY

BOOKS - SURA BIOLOGY (TAMIL ENGLISH)

PLANT ANATOMY AND PLANT PHYSIOLOGY

Textbook Evaluation Choose The Correct Answer

1. Casparian strips are present in the _____ of the root.

A. cortex

B. pith

C. pericycle

D. endodermis

Answer: D

Watch Video Solution

2. The endarch condition is the characteristic feature of

A. root

B. stem

C. leaves

D. flower

Answer: B

Watch Video Solution

3. The xylem and phloem arranged side by side on same radius is called _____ .

A. radial

B. amphivasal

C. conjoint

D. None of these

Answer: C

Watch Video Solution

4. Which is formed during anaerobic respiration

A. Carbohydrate

B. Ethyl alcohol

C. Acetyl CoA

D. Pyruvate

Answer: B

Watch Video Solution

5. Kreb's cycle takes place in

A. chloroplast

B. mitochondrial matrix

C. stomata

D. iriner mitochondrial membrane

Answer: B

Watch Video Solution

6. Oxygen is produced at what point during photosynthesis?

A. when ATP is converted to ADP.

B. when CO_2 is fixed.

C. when H_2O is splitted.

D. All of these .

Answer: C

Watch Video Solution

Textbook Evaluation Fill In The Blank

1. Cortex lies between _____ .

Watch Video Solution

2. Xylem and phloem occurring on the same radius constitute a vascular bundle called _____ .

Watch Video Solution

3. Glycolysis occurs in _____ of cell.

Watch Video Solution

4. The source of O_2 liberated in photosynthesis is _____ .

Watch Video Solution

5. _____ is ATP factory of the cells.

Watch Video Solution

Textbook Evaluation State Whether The Statements Are True Of False Correct The False Statement

1. Phloem tissue is involved in the transport of water in plant.

Watch Video Solution

2. The waxy protective covering of a plant is called as cuticle.

Watch Video Solution

3. In monocot stem cambium is present in between xylem and phloem.

Watch Video Solution

4. Palisade parenchyma cells occur below upper epidermis in dicot root.

Watch Video Solution

5. Mesophyll contains chlorophyll.

Watch Video Solution

6. Anaerobic respiration produces more ATP than aerobic respiration.

Watch Video Solution

Textbook Evaluation Match The Following

1. 

View Text Solution

Textbook Evaluation Answer In A Sentence

1. What is collateral vascular bundle?

Watch Video Solution

2. Where does the carbon that is used in photosynthesis come from?

Watch Video Solution

3. What is the common step in aerobic and anaerobic pathway ?

Watch Video Solution

4. Name the phenomenon by which carbohydrates are oxidized to release ethyl alcohol.

Watch Video Solution

Textbook Evaluation Short Answer Questions

1. Describe the vascular bundles of a dicot stem.

Watch Video Solution

2. Write a short note on mesophyll.

Watch Video Solution

3. Draw and label the structure of oxysomes.

Watch Video Solution

4. Name the three basic tissue system in flowering plants.

Watch Video Solution

5. What is photosynthesis and where in a cell does it occur?

Watch Video Solution

6. What is respiratory quotient?

Watch Video Solution

7. Why should the light dependent reaction occur before the light independent reaction?

Watch Video Solution

8. Write the reaction for photosynthesis.

Watch Video Solution

Textbook Evaluation Long Answer Questions

1. Differentiate the following

Monocot root and Dicot root

Watch Video Solution

2. Differentiate the following

Aerobic and Anaerobic respiration

Watch Video Solution

3. Describe and name three stages of cellular respiration that aerobic organisms use to obtain energy from glucose.

Watch Video Solution

4. How does the light dependent reaction differ from the light independent reaction? What are the end product and rectants in each? Where does each reaction occur within the chloroplast?

Watch Video Solution

Textbook Evaluation Higher Order Thinking Skills Hots

1. The reactions of photosynthesis make up a biochemical pathway.

What are the reactants and products for both light and dark reactions.

Watch Video Solution

2. The reactions of photosynthesis make up a biochemical pathway.

Explain how the biochemical pathway of photosynthesis recycles many of its own reactions and identify the recycled reactants.

Watch Video Solution

3. Where do the light dependent reaction and the Calvin cyd e occur in the chloroplast?

Watch Video Solution

Additional Question Answers Choose The Correct Answer

1. Amphivasal bundle belongs to _____ type of vascular bundle.

A. concentric

B. collateral

C. conjoint

D. radial

Answer: A

 Watch Video Solution

2. Exarch and tetrarch xylem are a feature of _____ .

A. dicot stem

B. dicot leaf

C. monocot root

D. dicot root

Answer: D

Watch Video Solution

3. Starch sheath in another name of

A. epidermis

B. pericycle

C. endodermis

D. hypodermis

Answer: C

Watch Video Solution

4. Protoxylem lacuna refers to a _____ .

A. thickening

B. arrangement of xylem

C. a cavity

D. exarch xylem

Answer: C

Watch Video Solution

5. Mitochondria were discovered by _____ .

A. Sachs

B. Kelvin

C. Melvin

D. Kolliker

Answer: D

Watch Video Solution

6. The _____ are racket shaped particles found in inner mitochondrial membrane.

A. Porin

B. ATP

C. Oxysorne

D. Grana

Answer: C

Watch Video Solution

7. Respiratory quotient for aerobic respiration is _____ .

A. 2

B. infinity

C. 1

D. 0

Answer: C

Watch Video Solution

8. _____ is the outer most layer.

A. Stomata

B. Epidermis

C. Periderm

D. Skin

Answer: B

 Watch Video Solution

9. _____ helps in transpiration.

A. Stomata

B. Epidermis

C. Trichomes

D. Root hairs

Answer: A

Watch Video Solution

10. _____ help in absorption of water and minerals.

A. Root hairs

B. Stomata

C. Epidermis

D. Trichomes

Answer: A

 Watch Video Solution

11. _____ is the outermost layer of the root.

A. Epiblema

B. Cortex

C. Endodermis

D. Stele

Answer: A

Watch Video Solution

12. The tissue present between the upper and lower epidermis of a dicot leaf is called _____ .

A. Lower epidermis tissue

B. Pith

C. Upper epidermis tissue

D. Mesophyll

Answer: D

Watch Video Solution

13. Who discovered light dependent photosynthesis?

A. Robin Hill

B. Nehemiah Grew

C. Kolliker

D. Melvin Calvin

Answer: A

 Watch Video Solution

14. Mitochondria contains _____ of protein.

A. 70 - 80 %

B. 80 - 90 %

C. 60 -70 %

D. 50 - 60 %

Answer: C

Watch Video Solution

15. Chloroplasts are _____ shaped organelles.

A. disc

B. round

C. oval

D. circle

Answer: C

Watch Video Solution

16. The inner mitochondrial membrane gives rise to finger like projections called _____

A. oxysomes

B. matrix

C. cristae

D. stalk

Answer: C

Watch Video Solution

17. Leucoplasts are _____ plasfids.

A. colourless

B. yellow

C. orange

D. red

Answer: A

Watch Video Solution

18. The vascular bundle is surrounded by a sheath of parenchymatous cells called _____ .

A. bulliform cells

B. bundle sheath

C. protoxylem lacuna

D. ground tissue

Answer: B

Watch Video Solution

19. Stacks of grana are interconnected to each other by _____ channels

A. fret channels

B. vascular bundles

C. accessory pigments

D. epidermis

Answer: A

Watch Video Solution

20. Photosynthesis takes place inside the _____ .

A. chloroplast

B. mitochondria

C. parenchyma

D. mesophyll

Answer: A

Watch Video Solution

21. Tue tissue found between xylem and phloem in a root is called _____ .

A. ground

B. dermal

C. vascular

D. none of the above

Answer: C

Watch Video Solution

22. An example of amphicribral vascular bundle is _____ .

A. Dracaena

B. Fern

C. Cucurbita

D. none of these

Answer: B

Watch Video Solution

23. Substance present in casparian strips.

A. glycogen

B. cytoplasm

C. suberin

D. grana

Answer: C

Watch Video Solution

24. Chloroplasts are present in the _____ cells.

A. guard

B. bulliform

C. vascular

D. bundle sheath

Answer: A

Watch Video Solution

25. All tissues inner to endodermis of a dicot root constitute _____ .

A. Cortex

B. Epiblema

C. Rhizodermis

D. Stele

Answer: D

Watch Video Solution

26. In a dicot stem, the _____ occurs between vascular bundle and endodermis.

A. pericycle

B. stele

C. pith

D. epidermis

Answer: A

Watch Video Solution

27. (i) In a dicot stem, the hypodermis consists of collenchymatous cells.

(ii) In a monocot stem, the hypodermis consists of sclerenchymatous cells.

(iii) In a dicot stem, pith is absent

(iv) In a monocot stem, pith is present

A. ii & iv are correct

B. iii is correct

C. i & ii are correct

D. i & iii are correct

Answer: C

Watch Video Solution

Additional Question Answers Fill In The Blanks

1. The vascular bundles in cucurbita are described as _____ .

Watch Video Solution

2. Closed vascular bundle refers to absence of _____ .

Watch Video Solution

3. _____ is the innermost layer of cortex.

Watch Video Solution

4. The band like thickenings found in endodermis of dicot root are called _____ .

Watch Video Solution

5. All tissues inner to endodermis constitute _____ .

Watch Video Solution

6. Stele includes pericycle and _____ .

Watch Video Solution

7. Tue tissue found between xylem and phloem in a root is called _____ .

Watch Video Solution

8. _____ is absent in the epiblema of a root.

Watch Video Solution

9. Caspari.an strips are made of _____ .

Watch Video Solution

10. In monocot root, xylem is exarch and _____ .

Watch Video Solution

11. Cambium is absent in monocots and hence no _____ is seen.

Watch Video Solution

12. The tissue present between the upper and lower epidermis of a dicot leaf is called _____ .

Watch Video Solution

13. The _____ in a dicot leaf help in gaseous exchange.

Watch Video Solution

14. The vascular bundle of dicot leaf is surrounded by a layer of cells called _____ .

Watch Video Solution

15. The thin walled and large epidermal cells in epidermis of a monocot leaf is called _____ .

Watch Video Solution

16. The matrix of chloroplast is called _____ .

Watch Video Solution

17. Stack of thylakoids is called _____ .

Watch Video Solution

18. _____ is the primary pigment in photosynthesis.

Watch Video Solution

19. Chlorophyll 'a' and accessory pigments together form _____ .

Watch Video Solution

20. What is reaction centre in photosynthesis?

Watch Video Solution

21. Dark reaction is also called _____

Watch Video Solution

22. Light reaction is also called _____ .

Watch Video Solution

23. ATP stands for _____ .

Watch Video Solution

24. Dark reaction occurs in _____ of chloroplast.

Watch Video Solution

25. Porins in mitochondrial membrane are made of _____ .

Watch Video Solution

26. _____ is called power house of the cell.

Watch Video Solution

27. Mitochondria were discovered by _____ .

Watch Video Solution

28. The inner mitochondrial membrane gives rise to finger like projections called _____

Watch Video Solution

29. the oxysomes are involved in _____.

Watch Video Solution

30. Oxysome is also known as _____ .

Watch Video Solution

31. The _____ are racket shaped particles found in inner mitochondrial membrane.

Watch Video Solution

32. _____ is the main organ of cell respiration.

Watch Video Solution

33. Cellular respiration is a _____ process.

Watch Video Solution

34. Pyruvic acid is a _____carbon molecule.

Watch Video Solution

35. During _____ glucose is broken into pyruvic acid.

Watch Video Solution

36. Glycolysis occurs in _____ of cell.

Watch Video Solution

37. Krebs cycle occurs in _____ .

Watch Video Solution

38. Each molecule of glucose produce _____ molecules of pyruvic acid.

Watch Video Solution

39. _____ is the first step in aerobic and anaerobic respiration.

Watch Video Solution

40. TCA cycle is also known as _____ .

Watch Video Solution

41. In electron transport chain _____ is the ultimate acceptor of electrons.

Watch Video Solution

42. Tissue system of plants was classified by _____ .

Watch Video Solution

43. _____ is known as Father of plant anatomy.

Watch Video Solution

44. The lateral roots originate from _____ .

Watch Video Solution

45. The arrangement of xylem and phloem in roots is described as _____ .

Watch Video Solution

46. Phloem consists of _____elements and companion cells.

Watch Video Solution

47. _____ and root hairs are the epidermal outgrowths.

 Watch Video Solution

48. Sachs classified tissue system in plants into _____ types.

 Watch Video Solution

49. _____ is also called the epidermal tissue

Watch Video Solution

50. Dermal or Epidermal tissue system consists of epidermis, stomata and _____ .

Watch Video Solution

51. Parenchyma, collenchyma and sclerenchyma tissues are present in the _____ tissue system.

Watch Video Solution

52. _____ type of vascular bundle is seem is Cucurbita.

Watch Video Solution

53. _____ is the study of internal structure of plants.

Watch Video Solution

54. _____ are the group of cells that are similar or dissimilar in structure and origin, but perform similar function.

Watch Video Solution

55. The first account of internal structure of plants was published by_____ .

Watch Video Solution

56. The vascular tissue system consists of _____ and _____ tissues.

Watch Video Solution

57. What is endarch xylem?

Watch Video Solution

58. An example of an amphivasal bundle is _____ .

Watch Video Solution

59. Xylem and phloem tissues are called _____ tissues.

Watch Video Solution

60. _____ tissue system helps in the transport of water minerals and food.

Watch Video Solution

61. _____ and root hairs are the epidermal outgrowths.

Watch Video Solution

62. Radial, conjoint and concentric are types of _____ bundles.

Watch Video Solution

63. An example of an open collateral bundle is _____ .

Watch Video Solution

64. An example of closed collateral bundle is _____ .

Watch Video Solution

65. In a closed collateral bundle, the cambium is _____ .

Watch Video Solution

66. _____ and _____ are types of concentric vascular bundles.

Watch Video Solution

67. Xylem surrounds the phloem in _____ vascular bundle.

Watch Video Solution

68. Phloem surrounds the xylem in _____ vascular bundle.

Watch Video Solution

69. Stomata helps in _____ .

Watch Video Solution

70. In a dicot root, the conjunctive tissue is made up of _____ .

Watch Video Solution

71. Young roots contains _____ in dicot root.

Watch Video Solution

72. All tissues inner to endodermis of a dicot root constitute _____ .

Watch Video Solution

73. The hypodermis of dicot stem consists of 3-6 layers of _____ cells.

Watch Video Solution

74. _____ cells provide mechanical support to dicot stem.

Watch Video Solution

75. Band like thickenings on their radial and inner tangential walls called _____ .

Watch Video Solution

76. _____ in monocot roots consists of pericycle, vascular tissues and pith.

Watch Video Solution

77. _____ in monocot roots contains more amount of starch grains.

Watch Video Solution

78. Endodermis in a dicot stem is also known as_____ .

Watch Video Solution

79. In a dicot leaf, each vascular bundle consists of _____ lying towards the upper epidermis and _____ towards the lower epidermis.

Watch Video Solution

80. Monocot leaf is also knows as _____ leaf.

Watch Video Solution

81. Dicot leaf is also known as _____ leaf.

Watch Video Solution

82. _____ parenchyma take part in photosynthesis in a dicot leaf

Watch Video Solution

83. _____ parenchyma helps in gaseous exchange in a dicot leaf.

Watch Video Solution

84. Mesophyll of dicot leaf is differentiated into _____ and _____ parench y ma.

Watch Video Solution

85. Mesophyll of a monocot leaf contains _____ .

Watch Video Solution

86. _____ are double membrane bound organelles found in plants and some algae .

Watch Video Solution

87. _____ are responsible for preparation and storage of food.

Watch Video Solution

88. There are _____ types of plastids.

Watch Video Solution

89. _____ are green coloured plastids.

Watch Video Solution

90. Chloroplasts are green plastids containing green pigment called_____ .

Watch Video Solution

91. Stack of thylakoids is called _____ .

Watch Video Solution

92. Stacks of grana are interconnected to each other by _____ channels

Watch Video Solution

93. Outer and inner membrane of a chloroplast is seperated by a _____ space.

Watch Video Solution

94. _____ is the primary pigment that traps solar energy and converts it into electrical and chemical energy.

Watch Video Solution

95. Pigments such as chlorophyll 'b' and carotenoids are called_____ .

Watch Video Solution

96. Entire process of photosynthesis takes place inside the _____ .

Watch Video Solution

97. Hill's reaction was discovered by_____ .

Watch Video Solution

98. Reaction centres and the accessory pigments together are called_____ .

Watch Video Solution

99. Mitochondrial membranes has _____ molecules which form channels for passage of molecules through it.

Watch Video Solution

100. _____ increases the inner surface area of mitochondria to hold variety of enzymes.

Watch Video Solution

101. Energy currency of the cell is_____ .

Watch Video Solution

102. Which is the first product of kreb's cycle?

Watch Video Solution

103. Light reaction takes place in the presence of light energy in _____ membranes of the chloroplasts.

Watch Video Solution

104. Energy released from _____ is used to make ATP in respiration.

Watch Video Solution

105. Calvin cycle is carried out in the _____ of light.

Watch Video Solution

106. Mitochondria were discovered by _____ .

Watch Video Solution

107. _____ are organelles within eukaryotic cells that produce ATP.

Watch Video Solution

108. _____ mitochondrial membrane is semi permeable membrane and regulates the passage of materials into and out of the mitochondria.

Watch Video Solution

109. _____ was conferred the Bharat Ratna for his contribution of artificial photosynthesis.

Watch Video Solution

110. The mitochondrial matrix is a complex mixture of _____ and_____ .

Watch Video Solution

111. Mitochondria is the main organelle of_____ .

Watch Video Solution

112. _____ means glucose splitting.

Watch Video Solution

113. _____ is the ratio of volume of carbon dioxide liberated and the volume of oxygen

consumed during respiration.

Watch Video Solution

114. During anaerobic respiration, _____ is converted into ethanol or lactate.

Watch Video Solution

115. Father ofIndian Plant Anatomy is_____ .

Watch Video Solution

116. _____ is the site of origin of Lateral roots in dicot root.

Watch Video Solution

117. During water stress conditions, the special cells that help in the rolling and unrolling of leaves there by avoid water loss is _____ .

Watch Video Solution

118. _____ in dicot stem is multilayered, parenchymatous with alternating patches of sclerenchyma.

Watch Video Solution

119. _____ provides mechanical support in a monocot stem.

Watch Video Solution

120. _____ is the inner most layer of cortex in a dicot stem.

Watch Video Solution

121. _____ are skull shaped, found scattered in the ground tissue of monocot stem.

Watch Video Solution

122. In mature vascular bundle of monocot stern, the lower most protoxylem disintegrates and form a cavity called _____ .

Watch Video Solution

123. The tissue present between the upper and lower epidermis of a dicot leaf is called _____ .

Watch Video Solution

124. The matrix of a chloroplast contains _____ ribosomes.

Watch Video Solution

125. In _____ carbon dioxide combines with water in the pre sence of sunlight and chlorophyll to form carbohydrates .

Watch Video Solution

126. During photosynthesis, _____ is released as a b y product.

Watch Video Solution

Additional Question Answers Match The Following

1. 

View Text Solution

2. 

View Text Solution

3. 

View Text Solution

4. 

View Text Solution

5. 

View Text Solution

6. 

View Text Solution

7. 

View Text Solution

8. 

View Text Solution

9. MATCH THE COLUMNS I, II AND III CORRECITY

:

View Text Solution

Additional Question Answers State Whether The Following Statements Are True Ro False Correct

The False Statement

1. ATP is not produced during anaerobic respiration.

Watch Video Solution

2. Electron transport chain helps to release energy via electrons.

Watch Video Solution

3. Krebs cycle is not seen in anaeroblc respiration

Watch Video Solution

4. Biosynthetic phase is carried out in the stroma.

Watch Video Solution

5. Cristae increases the inner surface area of the mitochondria.

Watch Video Solution

6. The intake of oxygen and release of CO_2 by plants is called cellular respiration .

Watch Video Solution

7. Skull shaped vascular bundles are seen is monocot stem.

Watch Video Solution

8. Artificial photosynthesis is a method for producing renewable energy by the use of sunlight.

Watch Video Solution

9. Mitochondria consists of 50% proteins and lipids.

Watch Video Solution

10. Glycolysis takes place in the mitochondria.

Watch Video Solution

11. Krebs cycle is also called as Calvin Cycle.

Watch Video Solution

12. Calvin cycle cannot be carried out in the absence of light.

Watch Video Solution

13. In bicollateral bundle, the xylem is present on both outer and inner side of phloem.

Watch Video Solution

14. In exarch condition, Protoxylem lies towards the centre and metaxylem lies towards the periphery.

Watch Video Solution

15. Light reaction takes place in the ribosome of the chloroplast.

Watch Video Solution

16. The condition in which xylem and phloem are present in different radius - alternating with each other is known as - Radial Bundles

Watch Video Solution

17. In the concentric type of bundle, the phloem is present on both outer and inner side of xylem.

Watch Video Solution

18. Vascular bundles are conjoint collateral closed and endarch in Dicot stem.

Watch Video Solution

19. The pigments such as carotenoids, chlorophyll b are known as primary pigments.

Watch Video Solution

20. ETC is located on the inner membrane of Mitochondria.

Watch Video Solution

21. Thylakoids forms a stack of disc like structures called stroma.

Watch Video Solution

22. The inner mitochondrial membrane gives rise to finger like projections called axysomes.

Watch Video Solution

23. Biochemical process occurs within cells where the food is oxidized to obtain energy, this is known as external respiration.

Watch Video Solution

24. The oxidation of pyruvic acid into CO_2 and water takes place through calvin cycle.

Watch Video Solution

Additional Question Answers Assertion And Reason

1. Assertion : Young root contain s pith whereas i n old root pith is absent.

Reason : Pith is soft and spongy Young root

contains pith but as the tree matures it spith transforms into other cells.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: a

 Watch Video Solution

2. Assertion : Cristae increases the inner surface area of mitochondria.

Reason : Cristae involve in ATP synthesis.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: b

 Watch Video Solution

3. Assertion : Pholem conducts food materials to different parts of the plant.

Reason : Xylem conducts water and minerals to different parts of the plant.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: b

Watch Video Solution

4. Assertion : Conjunctive tissue is made up of parenchyma in dicot roots.

Reason : Conjunctive tissue is made up of sclerenchyma in monocot roots.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: b

 Watch Video Solution

5. Assertion : Chlorophyll 'a' is called as reaction centre.

Reason : Chlorophyll 'a' is the pigment that traps solar energy and converts it into chemical energy.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: a

Watch Video Solution

6. Assertion : Photosynthesis is a redox process.

Reason : Oxidation of carbon dioxideand reduction of water takes place in photo syntheses.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of

Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: d

 Watch Video Solution

7. Assertion : Krebs cycle occurs in the mitochondria matrix.

Reason: The electrons, as they move through

the system, release energy which is trapped by ADP to synthesize ATP.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: b

Watch Video Solution

8. Assertion: A cell cannot get its energy directly from glucose.

Reason: In respiration the energy released from glucose is used to make ATP.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: a

Watch Video Solution

9. Assertion: Monocot leaf has upper and lower epidermis.

Reason: each vascular bundle is surrounded by parenchymatous bundle sheath.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: d

Watch Video Solution

10. Assertion: Oxidative phosphorylation requires oxygen

Reason: Oxidative phosphorylation occurs in chloroplast.

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion.

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. Assertion is true but Reason is false.

D. Both Assertion and Reason are false.

Answer: c

 Watch Video Solution

Additional Question Answers Analogy Type Questions Identify The First Words And Their Relationship And Suggest A Suitable Word For The Fourth Blank

1. Internal factors : Pigments :: External factors : _____ .

Watch Video Solution

2. Chlorophyll 'a' Primary pigment :: Chlorophyll 'b': _____ .

Watch Video Solution

3. Anaerobic respiration : Without oxygen :: Aerobic respiration : _____ .

Watch Video Solution

4. Krebs cycle occurs in _____ .

Watch Video Solution

5. Light dependent photosynthesis: Robin Hill :: Light independent reactions : _____ .

Watch Video Solution

6. Proto xylem lies towards center :.Endarch Proto xylem lies towards periphery : _____ .

Watch Video Solution

7. Four xylem group : tetrarch

Many xylem group : _____ .

Watch Video Solution

8. Conducts water and minerals : Xylem

Conducts food materials : _____ .

Watch Video Solution

9. Xylem surrounds phloem: Amphivasal

Phloem surrounds xylem : _____ .

Watch Video Solution

Additional Question Answers Answer In A Word

1. What is the common step in aerobic and anaerobic pathway ?

Watch Video Solution

2. Energy currency of the cell is_____ .

Watch Video Solution

3. _____ is called power house of the cell.

Watch Video Solution

4. _____ is the primary pigment in photosynthesis.

Watch Video Solution

5. Dark reaction is also called _____

Watch Video Solution

6. The matrix of chloroplast is called _____ .

Watch Video Solution

7. Coloured plastids.

Watch Video Solution

8. Tissue responsible for secondary growth.

Watch Video Solution

9. Arrangement of xylem in a root.

Watch Video Solution

10. Arrangement of xylem in a stem.

Watch Video Solution

11. ATP formation occuring during electron transport chain of aerobic respiration.

12. Where do we see radial, exarch and tetrarch vascular bundle.

13. The other name of epiblema.

Watch Video Solution

14. Shape of oxysome.

Watch Video Solution

15. Location of oxysomes

Watch Video Solution

16. Which enzyme is released by yeast during fermentation?

Watch Video Solution

17. Which is the first product of kreb's cycle?

Watch Video Solution

18. The end product of oxidative phosphorylation is _____ .

Watch Video Solution

19. Substance present in casparian strips.

Watch Video Solution

Additional Question Answers Answer In A Sentence

1. How are plant tissues classified?

Watch Video Solution

2. Name the types of concentric bundles.

Watch Video Solution

3. What is endarch xylem?

Watch Video Solution

4. What is exarch xylem?

Watch Video Solution

5. What is protoxylem lacuna?

Watch Video Solution

6. Give the equation for aerobic respiration.

Watch Video Solution

Additional Question Answers Give Reasons For The Following Statements

1. What is the common step in aerobic and anaerobic pathway ?

Watch Video Solution

2. Monocot leaf is desc ri bed a s Isobilateral

Watch Video Solution

3. More number of stomata occur in lower epidermis of leaf.

Watch Video Solution

4. Pith is not differentiated in monocot stems.

Watch Video Solution

5. _____ is called power house of the cell.

Watch Video Solution

6. Cristae increases the inner surface area of the mitochondria.

Watch Video Solution

Additional Question Answers Very Short Answers

1. Sachs classified tissue system in plants into _____ types.

Watch Video Solution

2. What is protoxylem lacuna?

Watch Video Solution

3. Substance present in casparian strips.

Watch Video Solution

4. How are Plastids classified?

Watch Video Solution

5. Draw diagrams to represent the types of concentric vascular bundles.

Watch Video Solution

6. What is starch sheath?

Watch Video Solution

7. What are bulliform cells ? How it helps the plants ?

Watch Video Solution

8. What are grana?

Watch Video Solution

9. Differentiate Dicot leaf and Monocot leaf.

Watch Video Solution

10. What is reaction centre in photosynthesis?

Watch Video Solution

11. What are photosystems?

Watch Video Solution

12. Differentiate external and cellular respiration.

Watch Video Solution

13. What is electron transport chain?

Watch Video Solution

14. Draw the ultrastructure of mitochondria and label the parts.

Watch Video Solution

15. What is anaerobic respiration?

Watch Video Solution

Additional Question Answers Short Answers

1. What are the functions of chloroplast ?

Watch Video Solution

2. Name the internal factors affecting photosynthesis.

Watch Video Solution

3. List out the external factors affecting photosynthesis.

Watch Video Solution

4. List the functions of mitochondria.

Watch Video Solution

Additional Question Answers Long Answers

1. Write a note on vascular tissue system.

Watch Video Solution

2. Draw a transverse section of dicot leaf and label the parts .

Watch Video Solution

3. Describe the structure of Mitochandria.

Watch Video Solution

4. List the difference between Dicot and Monocot stem.

Watch Video Solution

5. Describe the ultrastructure of a chloroplast.

Watch Video Solution

Additional Question Answers Higher Order Thinking Skills Hots

1. 

What do you infer from this diagram? Identify it.

View Text Solution

2. 

Classify the type.

View Text Solution

3. 

Give an example.

View Text Solution

4. Raman went to a garden. He saw that the stem of the Banyan tree becomes thicker every year whereas such a change is not seen in a coconut tree. Can you give a explanation for this.

Watch Video Solution

Additional Question Answers Value Based Questions

1. Fermentation is a process applicable to Bakery and Breweries. What is the scientific explanation for this?

Watch Video Solution

2. Why is a dicot leaf described as dorsiventral?

Watch Video Solution

3. Can Human beings survive with anaerobic respiration - Justify.

Watch Video Solution