X Class Biological Science objective Knowledge

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1. What are the basic processes that occur in the body of an organism**? 1**

2. What is the use of these basic processes?

3. Name the molecules required for the growth of a cell?

4. What do you understand about proteins and amino acids?

5. What is meant by Auto tropic? Name the Example?

6. What is meant by photosynthesis, where it occurs?

7. What is meant by reaction intermediates?

8. What is the source of energy that require for photosynthesis?

9. What the primary organs is of plant that carryout photosynthesis?

10. Name the pigment that gives green color to leaves of a plant?

11. Define ‘Photosynthesis’?

12. What are the low energy substances in the photosynthesis?

13. What are the high energy substances formed by photosynthesis?

14. How can you test the presence of starch in the leaves?

15. Name the external factors of photosynthesis?

16. Name the internal factors of photosynthesis?

17. Name the tiny particles of light is called?

18. What is meant by quantum?

19. How many colors will have in visible light?

20. Explain how the wave length of light plays its role in photosynthesis?

21. In which color of light photosynthesis will not take place and why?

22. Name the molecules on thylacoid membrane of chloroplast that initiate photosynthesis reaction?

23. How carbon dioxide enter into leaf?

24. Carbon in CO2 is converted into\_\_\_\_\_\_\_\_\_\_\_\_\_ in photosynthesis.

25. What will you observe in iodine test if starch is present in leaf?

26. What is the role of potassium hydroxide to prove CO2 is necessary for photosynthesis?

27. The rate of diffusion of gases is depend upon the number of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

28. Will chlorophyll alone present in chloroplast can be able to perform photosynthesis?

29. Chloroplasts occur mainly in the \_\_\_\_\_\_\_\_\_\_\_\_ cells of leaves.

30. What is the shape of chloroplast?

31. The chloroplast filled with colorless area called\_\_\_\_\_\_\_\_\_\_

32. Which is called Grana? Where it is located?

33. What is pigment?

34. Can you say whether the chlorophyll and other pigments are water soluble or fat soluble?

35.In which part of thylacoid membrane the chlorophyll is located?

36. Name the gas that liberate in photosynthesis by splitting of water molecule?

37. In photosynthesis \_\_\_\_\_\_\_\_\_\_\_\_\_energy is converted into \_\_\_\_\_\_\_\_\_\_ energy.

38. Define Oxidation & Reduction?

39. What will happen in light reaction of photosynthesis?

40. The substance which gives electrons is called\_\_\_\_\_\_\_\_

41. The substance which accept electron is called\_\_\_\_\_\_\_\_

42. Name the substances of electron acceptors? 2

43. What are the end products of light reaction?

44. Why it is called Dark reaction?

45. Name the molecule where energy is stored by biological system?

46. During the process of energy requirement, ATP hydrolyses to\_\_\_\_\_\_

47. What is the basic mechanism of trapping solar energy by chlorophyll?

Show by diagrammatic formula.

48. How chlorophyll gets back its original status? Show by diagrammatic

formula.

49. What is photolysis of water?

50. The protons left behind after splitting of water by light, [through chlorophyll

molecule present in PS] accumulate in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

51. Show reactions of photosynthesis diagrammatically in the formation of carbo-

hydrates and NADPH.

52. Name the American scientist who identified the entire series of reactions

involved in the conversion of carbon dioxide to glucose.

53. Show diagrammatically how one CO2 molecule transferred to

2 phosphoglyseric acid molecules. [2 PGA]

54. PGA is converted into\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

55. Name the products of light reaction used in conversion of PGA?

56. Two, molecules of Glyceraldehyde-3-phosphate produce\_\_\_ molecules of

glucose which contains\_\_\_\_ carbon atoms.

57. Glucose converts into\_\_\_\_\_\_

58. \_\_\_\_\_ molecules of Ribulose 1, 5-diphosphate is regenerated from \_\_\_\_\_

number of glyceraldehyde-3-phosphates.

59. What is end product of dark reaction?

60. Whether starch is soluble in water OR not?

61.In which form the final product, passes to storage organs of plants?

62. The final product transport through\_\_\_\_\_\_\_\_

63. The expanded portion of leaf is called \_\_\_\_\_\_\_\_\_\_\_\_

64. The prominent vein in the middle of leaf is called\_\_\_\_\_\_\_\_

65. What factors determine the crop productivity?

66. What is the difference between stoma and stomata?

3