GURU GOBIND SINGH PUBLIC SCHOOL
SEC V/B, B.S.CITY

Class: XI **Subject: Biology** **Level 1**

1. Which fungal organism is often employed in study of experimental genetics?
2. Why are archaebacteria commonly called as living fossils?
3. Which class of fungi is referred as the conjugation fungi?
4. How are viroids different from viruses ?
5. Which important events in the life cycle of heterosporous ferns is considered to be precursor of seed habit?
6. When and where does reduction division takes place in the life cycle of a Liverwort ,a moss , a gymnosperm?
7. What is heterospory ? Briefly comment on its significance .Give two example
8. All vertebrates are chordates but all chordates are not vertebrates?
9. How important is the presence of air bladder in pisces ?
10. Write the fiorai formula of a actinomorphic ,bisexual ,hypogynous flower with five united sepals , five free petal ,five free stamens and two united carpels with superior ovary and axile placentation .
11. Define phyllotaxy .Classify it with sutable example . Wtrite its significance .
12. Draw the floral diagram of family solanaceae .Write its floral formuia .Mention important plants which are sources of food .
13. Differentiate between spring wood and autumn wood .
14. What are two kinds of intrections of watert molecules that allow water to travel upward in plants ? Which other physical process helps in water transport to the top of trees and how?
15. Explain why xylem transport is unidirectional and phloem transport is bidirectional.
16. Describe transpiration pull model of water transport in plant .What are the factors influencing transpiration ?How it is useful to plant?
17. What is meant by apoplast pathway ?Why does it occur in cortex and not in endodermis ?
18. What do you understand by the terms outer space and inner space ?
19. How are deficiency symptoms related to the mobility of the element in the plants ?Explain with suitable example .
20. Describe the process of progressive reduction of one molecule of nitrogen during nitrogen fixation in leguiminous plants .
21. Why is photorespiration considered a wasteful process in C_3 Plants ?
22. When and where does photorespiration takes place in plants ? How does this process results in a loss in plants ?
23. Differentiate between light reaction and dark reaction ?
24. Differentiate between cyclic photophosphorylation and non cyclic photophosphorylation .
25. What is the law of limiting factors ? How would the rate of photosynthesis be affected if the soil water becomes limiting ? Explain.
26. Where does calvin cycle take place in chloroplast ? Explain the cycle .
27. What is meant by RQ ?When will the value of RQl be one and when it will be less than one ?
28. Describe briefly the main steps of glycolysis from triose phosphate onwards Highlight the reactions which release energy .
29. How does oxidative phosphorylation differ from photophosphorylation ?
30. Explain major steps in Krebs cycle When does this process occur in a cell ?
31. Why is abscisic acid is called as stress hormone ?

32. What are plant growth regulators ? Classify it.
33. The role of abscisic acid is both positive and negative . justify the statement.
34. Explain the terms – differentiation, dedifferentiation, redifferentiation.
35. Define growth.Classify it .Differentiate between arithmetic growth and geometric hrowth.
36. What do you mean by antagonistic hormone?Give two example.
37. What do you understand by the term plasticity? Describe a phenomenon showing plasticity with example

38. Explain the process of electron transport system occurring inside the inner membrane of mitochondria.
39. How are exarch and endarch condition different anatomically?
40. Differentiate between open and closed vascular bundles
41. What is casparian strip? What function does it perform?
42. What is annual ring?How the age of a tree is estimated?
43. Write the floral formula of family. Lilliaceae Draw the floral diagram
44. Classify the floweron the basis of relative position of floral organs in respect of the ovary on the thalamus.
45. Describe double fertilisation and triple fusion in angiospermic plants
46. Why the rhizoids are not called roots?
47. What do you mean alternation of generation?Explain haplo-diplontic life cycle
48. What is dikaryon?
49. Name a cyanobacterium which is rich soures of protein
50. Why are mycoplasma described as pleiomorphic?Mention two places where they occur?.