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- 1. Name one monocot & one dicot in which endosperm is present?
 - 2. Why are date palm referred to as dioecious?
 - 3. What is placentation?
 - 4. What is Rhizome? Give its two examples.
 - 5. Differentiate between epigynous & perigynous flowers.
 - 6. Give reason to justify that onion bulb is a modified stem?
 - 7. Describe that parts of a typical angiospermic leaf?
 - 8. Differentiate between a maize grain & a bean seed?
 - 9. Describethevarioustypes of placentations found inflowering plants & represent diagrammatically.
 - 10. Name two specialized kinds of parenchyma.
 - 11. What is the function of companion cells in phloem?
 - 12. Define meristem.
 - 13. Why is cambium considered to be a lateral meristem?
 - 14. Mention four characteristics of sunflower's vascular bundles.
 - 15. Differentiate between tracheids & vessels.
 - 16. Explain the structure & function of collenchyma.
 - 17. What are sieve elements? Explain their types & functions.
 - 18. Describe the internal structure of a monocot root with the help of a labeled diagram.
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- 28. Which is the important energy carrier in the cell? Where is it formed?
- 29. Name the monomer subunits which form nucleic acids on polymerization?
- 30. What are macromolecules? Give example.
- 31. Differentiate between nucleotide & nucleoside?
- 32. How are glycosidic bonds formed?
- 33. What do you mean by steady state condition?
- 34. Enumerate the functions of lipids?
- 35. Describe the lock & key hypothesis of enzyme action?
- 36. Explain briefly four levels of protein structure?
- 37. Define enzymes.Explainhowanenzymescataysedthereaction.Namethefactorswhich affect the rate of enzyme action.
- 38. Namethestageofcelldivisioninwhichpairedhomologouschromosomesgetshortened& thickened.
- 39. Which structure of animal cell forms the asters of the spindle?
- 40. Name the cells in which meiosis occurs.
- 41. What is the importance of DNA replication during interphase?
- 42. Distinguish between metaphase of mitosis & metaphase I of meiosis.
- 43. What is the approximate cell cycle duration in fast-dividing mammalian cells? Is this the same for all cells?
- 44. What is the significance of meiosis?
- 45. Differentiate between the mitosis of animal cell & plant cell.
- 46. Explain the various phases of meiosis II division.

- 47. Define totipotency?
- 48. Name two cell organelles which contain their own DNA?
- 49. Which cell organelle functions as "seggregation apparatus"?
- 50. Give two examples of gram positive bacteria?
- 51. What is the significance of plasma membrane?
- 52. Differentiate between gram positive and gram negative bacteria?
- 53. Why lysosomes are called "suicidal bags"?
- 54. Explain the functions of centrosome?
- 55. What is meant by active transport across a cell membrane?
- 56. Describe the ultrastructure of a cillium or flagellum?
- 57. Distinguish between prokaryotic & eukaryotic cell?