**INDIAN SCHOOL AL WADI AL KABIR**

**DEPARTMENT OF SCIENCE 2017 -18**

**BIOLOGY**

**HOLIDAY ASSIGNMENT - WORKSHEET**

**CLASS XI**

1. Fluid-mosaic model explains the structure of an important part of cell.
2. Who proposed this model?
3. How this quasi-fluid nature helps in performing the different functions of this part?
4. Write notes on one important function of this part?
5. Mitochondrion is not a part of endomembrane system. Do you agree? Justify your answer.
6. “9+2” arrangement of microtubules is connected to which cell organelle? Give the microtubular arrangement present in centriole.
7. Distinguish between:
8. Centromere and kinetochore
9. Acrocentric and telocentric
10. Nucleus and nucleolus
11. Rate of formation of carbonic acid from CO2 and water is very slow for uncatalysed reaction, but in the presence of enzyme carbonic anhydrase the rate is increased by about 10 million times. How do enzymes bring about such high rates of chemical conversions?
12. What are co-factors? Give a brief description.
13. With the help of a neat labeled diagram explain the structure of polynucleotide chains of DNA.
14. Name two different types of nitrogen bases. What is their importance?
15. Some cells like heart cells enter a stage called quiescent stage after G1 phase. What is the specialty of this particular phase?
16. Draw neat labeled diagrams of metaphase of mitosis and metaphase I of meiosis I

(Consider the chromosome number as 4).

1. Meiosis I is known reduction division and meiosis II as equational division. Justify.
2. Name four important unique events in prophase I of meiosis.
3. Define the following terms:
4. Venation
5. Phyllotaxy
6. Aestivation
7. Placentation
8. Draw the floral diagram of the family solanaceae and write its floral formula.
9. Explain the aestivation of the family papilionaceae and draw diagram.

Prepared by Ms. Rejitha S Page 1 of 1