DELHI PUBLIC SCHOOL, JAMMU Revision Sheet for Cycle Test I (2018-19)

Class: XII Subject: Biology

<u>Topics</u>: Reproduction in organisms, Sexual reproduction in flowering plants, Human reproduction, Reproductive health and Principles of Inheritance.

Very short Questions

- Q1. Why meiosis and gametogenesis are always interlinked?
- Q2. Give the importance of vegetative propagation in agriculture.
- Q3. Differentiate between:
 - 1. Zoospore and Zygote
- 2.Meiocytes and gametes
- Q4. Name the hormone responsible for the descent of testes into the scrotum. Why does the failure of this process results in sterility?
- Q5. Name the hormones responsible for the process of oogenesis and menstrual cycle in human female.
- Q6. Why do identical twins have same sex?
- Q7. What is the utility of mitochondria in the middle piece of sperm?

Short Questions

- Q8. Identify each part and write whether it is haploid (n) or diploid (2n).
 - i. Sepal ii. Style
- iii. Egg
- iv. Male gamete

- v. Uterus vi. Ovum
- Q9. How does a pollen mother cell develops into a mature pollen grain?
- Q10. What is the significance of reproductive health in a society?
- Q11. How many sperms will be produced from 100 primary spermatocytes and how many eggs from 100 primary oocytes?
- Q12. STDs can be considered as self invited diseases. Comment.
- Q13. What is amniocentesis? Why government has imposed ban on amniocentesis inspite of its importance in medical field?
- Q14. Define the following:
 - i. Allele

- ii. Gene
- iii. Inheritance

iv. Trait

- v. Epistatis
- vi. Pleiotrophy

Long Questions

- Q15. What are the suggestive reasons for population explosion?
- Q16. List the various categories of contraceptives that are presently available for birth control.
- Q17. Differentiate between spermatogenesis and oogenesis.
- Q18. Define and give examples of incomplete dominance and co dominance?
- Q19. In a cross between a tall pea plant with yellow seeds (TtYy) and a tall plant with green seeds (Ttyy), what proportion of the offspings could be expected to be:
 - a. Tall and green
- b. Dwarf and green
- Q20. Define mutation. Illustrate the types of mutation that leads to structural changes in chromosomes.
- Q21. Explain the chromosomal theory of inheritance.
- Q22. Explain the process of sex determination in human and insects.