પુ•ના International School
Shree Swaminarayan Gurukul, Zundal

Student Name					
Date	16/07/2020	Grade	XII SCIENCE	Roll no-	
Subject	BIOLOGY	Marks	50	Teacher's Sign	

PERIODIC ASSESSMENT – I [2020-21]

Question no 1 to 05 1 Mark each
Question no 06 to 10 2 Mark each
Question no 11 to 15 3 Mark each
Question no 16 to 20 4 Mark each

1. Offspring's derived by asexual reproduction are called clones. Justify giving two reasons.
2. Why is banana considered a good example of parthenocarpy?
3. Where is acrosome present in humans? Write its function.
4. What is a Cistron?
5. List the two main propositions of Oparin and Haldane.
6. The cell division involved in gamete formation is not of the same type in different organisms. Justify.
7. Name the bacterium responsible for the large holes seen in "Swiss Cheese". What are these holes due to?
8. Explain significance of the condition in which the testes remain suspended in scrotum outside the abdomen.
9. (a) Draw a neat labelled diagram of a nucleosome.

(b) Mention what enables histones to acquire a positive charge.

10. How do Darwin's finches illustrate adaptive radiation?
11. Mention the site of zygote formation in the ovule of a flowering plant. What happens to sepals, petals and stamens after fertilization? State the fate of zygote, ovule and ovary in these plants.
12. Double fertilization is reported in plants of both, castor and groundnut. However, the mature seeds of groundnut are non-albuminous and castor are albuminous. Explain the post fertilization events that are responsible for it.
13. Draw a labelled diagram of the reproductive system in a human female.
14. Discuss the role the enzyme DNA ligase plays during DNA replication.
15. How does industrial melanism support Darwin's theory of Natural Selection? Explain.
16. Enlist the changes that occur post- fertilization in plants.
    Or

Explain mutualism with the help of any two examples. How is it different from commensalism?

17. Draw a labelled diagram of the sectional view of a mature pollen grain in angiosperms. Explain the functions of its different parts.
18. When and where are primary oocytes formed in a human female? Trace the development of these oocytes till ovulation (in menstrual cycle). How do gonadotropins influence this developmental process?
19. What is 'semi-conservative' DNA. replication? How was it experimentally proved and by whom?
20. Explain the salient features of Hugo de Vries theory of mutation. How is Darwin's theory of natural selection different from it? Explain.