GLOBAL INDIAN INTERNATIONAL SCHOOL

Holiday Homework

Academic Session : 2019-20

Class XII (Science)

Physics

Q.1 Write short note on-

(i) Electric charge (ii) Electric field

Q.2 Give the properties of electric field lines.

Q.3 State coulomb's law. Also give it's vector form.

Q.4 Explain Electric flux.

Q.5 Prove that- V = E X d

Q.6 State Gauss's law, find EFI due to a conducting sphere.

Q.7 Derive the expression of EFI for a long straight charge conductor.

Q.8 Define Electric dipole and find the formula for intensity at axis and equator.

Q.9 Explain-

(i) Electric potential (ii) Electric dipole moment (iii) Equi-potential surface

(iv) Principle of Capacitor

Q.10 Find the formula for series and parallel combination of capacitors.

Chemistry

Solve the following **Questions**

Part-1

Chapter-01**(Solution**)

Examples Questions - 1.1 to 1.12

Intext Questions - 1.1 to 1.12

Exercise questions - 1.1 to 1.40

Part-2

Chapter-08**(Haloalkane and Haloarene)**

Examples Questions - 9.1 to 9.9

Intext Questions - 9.1 to 1.9

Exercise questions - 9.1 to 9.20

Learn the following.

(a)Modern Periodic table (b)Symbols and Atomic number**(1-60)**

Biology

Q-1. Draw the diagram of microsporangium of an angiosperm and label any four parts.

State the functions of its innermost wall layer.

Q-2. Given below is the diagram (NCERT book pg51. Fig.3.10)of a human ovum surrounded by a few sperms. Observe the diagram and answer the following questions:

a)- What is the role of zona pellucida in this process?

b)- How is the entry of sperm into the ovum facilitated?

c)- Specify the region of female reproductive system where the event represented in the diagram takes place?

Q-3. Refer NCERT book pg. 10-fig.1.5a, pg.14-fig.1.7-a…..

a)- State the type of gametes shown in the diagram .

b)- Identify the process taking place and the resultant structure.

c)- Name an organism that reproduces in this manner.

Q-4. Refer NCERT pg.50 fig.3.9-section-OVARIAN HORMONE LEVELS.

a)- Identify 'A" and "B".

b)- specify the source of the hormone marked in the diagram.

c)- Reason out why A peaks before B.

d)- Compare the role of A and B.

e)- Under which condition will the level of B continue to remain highon the 28th day?

Q-5. Why do wind pollinated plants often have a single ovule in each ovary?

Q-6. A farmer uses part of potato tuber without an eye for vegetative propagation.

Will he be able to raise new plants?

Q-7. Flowers of brinjal are chasmogamous while that of beans are cleistogamous . How do they differ from each other?

Q-8. Draw a labeled diagram of the microscopic structure of a human sperm.

Q-9. Draw a labeled diagram of the sectional view of a mature pollen grain in angiosperms. Explain the functions of its different parts.

Q-10. Give a schematic representation of oogenesis in humans. Mention the number of chromosomes at each stage. Correlate the life phases of the individual with the stages of the process.

Maths

Chapter: Relations & Functions **Exercise-1.1** Q. No. 5 & 12 **Exercise-1.3** Q.No. 8 & 11 **Chapter: Matrics** **Exercise-3.3** Q.No. 9 **Exercise-3.4** Q.No. 16 & 17	**Chapter: Inverse Trigonometric functions** **Exercise-2.2** Q.No. 11 & 15 **Chapter: Linear Programming** **Exercise-12.2** Q.No. 4, 9, 10. Note : All questions are from NCERT Book

English

Literature Worksheet
Ch-1, 2 [The Last Lesson, Lost Spring]
Poetry-
[My Mother at Sixty-Six, An Elementary School Classroom in a Slum]
Supplementary-
Ch-1 The Tiger King Ch-2 The Enemy