Summer Valley School, Dehradun

Address: 18, TegBahadur Road, Dehradun (UK) e-mail: summervalleyschool@gmail.com Tel: 0135-2673383, 2678356

Class XII /Assignment 1

30 March 2020

PHYSICS:

All the students of class XII will be required to do one project involving some physics related topics as per class XII Syllabus. The project work is to be assessed by a Visiting Examiner. You can choose any topic of your choice like Magnetism, Electricity, Logic Gates, Communication System, Optical Instruments, Electric Field, etc.

It must be Theoretical Project. Candidates are to prepare a technical report formally written including Title, Abstract, Some theoretical discussion, Experimental setup, Observations with table of Data Collected, Analysis and Discussion of results, Deduction, Conclusion, Bibliography, etc.

The report should be kept simple but neat & elegant.

Evaluation Criteria for the project is as follows:

Title of the Project

- i) Introduction
- ii) Contents
- iii) Analysis/Material Aid (graph, data, diagram, histogram, pie-chart, etc.)
- iv) Originality of work
- v) Conclusion/Comments
- vi) Bibliography

The project report should be of approximately 15-20 pages.

CHEMISTRY:

Chapter: Solid State

- Q1.Differentiate between crystalline and amorphous solids.
- Q2.Define space lattice and unit cell.
- Q3. Calculate the no. of particles per unit cell in the different types of cubic systems. Q4. An element crystallises in bcc structure. If the edge length of the unit cell is $400 \, \mathrm{pm}$, calculate (1) its radius and (ii) the interatomic distance in the crystal.
- Q5. The radius of an atom is 300pm. If it crystallises in fcc lattice, calculate the length of the edge of the unit cell. Also calculate the distance between the nearest neighbour.

Summer Valley School, Dehradun

Address: 18, TegBahadur Road, Dehradun (UK) e-mail: summervalleyschool@gmail.com Tel: 0135-2673383, 2678356

Class XII /Assignment 1

30 March 2020

BIOLOGY:

- 1. The following assignment is from UNIT 3: Biology and human welfare from your prescribed text book as thechapter 10 (human health and diseases) from the above mentioned unit is a general concept as most of youalready know that a Disease is any derivation from or interruption of the normal structure and function ofany part of the body, so with the reference to the chapter following terms are given below which will helpyou while going through the chapter.
- a. Pathogen: A disease causing agent.
- b. Vector: A vector is an agent, such as an insect, capable of transferring a pathogen from one organism to another.

Or

A vector can be mechanical carrier, e.g. a housefly carrying germs on its hairy legs.

Or

A vector can be a biological carrier, e.g. Female Anopheles mosquito carrying malarial parasite withinits body.

Malarial parasite is a causative agent and here female mosquito carrying this causative agent is Vector.

Now refer the above mentioned chapter, collate the information and write the causative agent (scientificname), Symptoms (any four major), Mode of spread/transmission,

Treatment/prevention (any two) in yournotebook for the following disease.

- I. Typhoid
- II.Pneumonia
- III. Common Cold
- IV. Dengue Fever
- V. Chikungunya.

NOTES-

- The following work is to be done in your class XII notebook and it will be checked as soon as school reopens.
- Worksheet will be provided separately (next week)

COMPUTER:

- Q1. Revise and learn the terms Contingencies, tautology, contradiction, consistent statement, converse, inverse, contra positive with examples.
- Q2. Learn all the Boolean laws PG-13 6 table 1.6. From computer science book by sumita arora

Summer Valley School, Dehradun

Address: 18, TegBahadur Road, Dehradun (UK) e-mail: summervalleyschool@gmail.com Tel: 0135-2673383, 2678356

Class XII /Assignment 1

30 March 2020

ECONOMICS:

Chapter - Demand & law of demand from Frank ISC Economics learn the following

- 1) definition of demand pg 8 ,types of demand(meaning of each type) pg 9
- 2) determinants of demand pg 10 (all points)&
- 3) demand function(statement & equation only) pg 15 statement written in bold letters After learning it write at least twice to ensure that you can write the meanings . Try writing equation of demand function at least 5 times in the manner given in book

ACCOUNTS:

- 1) Learn format of statement of profit& loss on page 9.21 &9.22& notes given underneath till page 9.23 from book DK goel volume 2
- 2) Learn format of balance sheet on page 9.3 & 9.4 from book DK goel volume 2
- 3) Learn examination notes on page 9.23 & 9.24 from book DK goel volume 2

After learning these formats & notes write atleast 5 times to make sure you have learnt them properly.