HOLIDAY HOMEWORK(2023-2024)

CLASS-12th

BIOLOGY

To prepare the project topic given roll number wise

Prepare 20 mcqs from each chapter

Economics

Read chapter thoroughly

Make 20 MCQ from each chapter

Prepare project on CBSE topics n guidelines

English

1. Make research based project on" Russia - Ukraine war"

Or

Child Labour

2. Read the chapters thoroughly

3.Prepare MCQ and case based questions of the chapters done

Chemistry

1.Prepare Ncert questions chapter 1,2 and 3.

2.Draw long form of periodic table on chart paper.

3.Make any working model from chemistry.

4. Write down chemistry practical in lab manual.

PHYSICS

A.Make a investigatory project on any one of the topic.( The pdf of the topics is already shared

in class group)

B. Do worksheet questions.

1.What is the direction of the electric field at the surface of a charged conductor having charge

density σ < 0?

2.Write the expression for the work done on an electric dipole of dipole moment p in turning it

from its position of stable equilibrium to a position of unstable equilibrium in a uniform electric

field E

3.

distance ‘d’ apart as shown in the figure. The electric field intensity is zero at a point ’P’ on the

line joining them as shown. Write two conclusions that you can draw from this

4.Show on a plot the nature of variation of the

Electric field (E) and

potential (V), of a (small) electric dipole with the distance (r) of the field point from the centre of

the dipole.

5.A point charge +Q is placed in the vicinity of a conducting surface. Draw the electric field lines

between the surface and the charge.

6.Define electric flux. Write its S.I. unit.

A charge q is enclosed by a spherical surface of radius R. If the radius is reduced to half, how

would the electric flux through the surface change?

7.thin straight infinitely long conducting wire having charge density X is enclosed by a cylindrical

surface of radius r and length l, its axis coinciding with the length of the wire. Find the

expression for the electric flux through the surface of the cylinder

8.Plot a graph showing the variation of coulomb force (F) versus (1/r2), where r is the distance

between the two charges of each pair of charges : (1µC, 2µC) and (2µC, – 3µC). Interpret the

graphs obtained

9.A hollow cylindrical box of length 1m and area of cross-section 25 cm2 is placed in a three

dimensional coordinate system as shown in the figure. The electric field in the region is given by

E→=50xi^ where E is in NC-1 and x is in metres.

Find Net flux through the cylinder.

Charge enclosed by the cylinder

10.Given a uniform electric field E→ = 2 × 103 i^ N/ C, find the flux of this field through a square

of side 20 cm, whose plane is parallel to the y-z plane. What would be the flux through the same

square, if the plane makes an angle of 30° with the x-axis?

11.A 500 µC charge is at the centre of a square of side 10 cm. Find the work done in moving a

charge of 10 µC between two diagonally opposite points on the square

12.hollow metal sphere of radius 5 cm is charged such that the potential on its surface is 10 V.

What is the potential at the centre of the sphere?

13.Two charges 2µC and – 2µC are placed at points A and B 5 cm apart. Depict an

equipotential surface of the system

14.The given graph shows variation of charge ‘q’ versus potential difference ‘V’ for two

capacitors C1 and C2. Both the capacitors have same plate seperation but plate area of C2 is

greater than that of C1. Which line (A or B) corresponds to C1 and why?

15.Two point charges, q1 = 10 × 10-8C, q2 = -2 × 10-8C are seperated by a distance of 60 cm

in air.

(i) Find at what distance from the 1st charge, q1 would the electric potential be zero.

(ii) Also calculate the electrostatic potential energy of the system

Web application

Write atleast 20 programs in Javascript manually along with the output.

At least the following javascript concepts should be covered : array, conditionals, loops, and strings.

Physical Education

Prepare physical education practical file and complete chapter 1 -5 and learn questions and answers

Mathematics

12th class make a chart for the formulae of I . T. F

**Accountancy**

1. Prepare chapters done in class thoroughly.

Practice objective and subjective types of questions.

2. Prepare a comprehensive project on a partnership firm which includes preparation of:

(a) Journal entries

(b) Ledger

(c) Trading and profit and loss account

(d) Profit and loss appropriation account

(e) Balance sheet

**Business Studies**

1. Prepare chapters done in class thoroughly.

Practice objective and subjective types of questions.

2. Prepare a project on marketing management designing your own product or service keeping in mind the following:

(a) Reason of selecting that product or service

(b) Competitors

(c) USP

(d) Range and price

(e) Name,logo, tagline

(f) Features

(g) Labelling, packaging, branding, promotion, transportation, warehousing etc.

3. Visit any industrial unit, factory, departmental store or any other organization and observe whether general principles of Management advocated by Henri Fayol are applicable or not.

Prepare a case study on that business organisation.