



DOON BHARTI PUBLIC SCHOOL

HOLIDAYS HOMEWORK

SESSION : 2022 – 23

Name of Student _____

Class XII

Section _____

Dear Parents,

Long summer break is the most joyful part of school life! Summer vacation is around the corner. We hope the children enjoyed their first spell in school as we enjoyed getting to know them.

Holidays are meant for enjoyment and if this time is used for creative pursuits, it becomes learning experience. The holiday homework has been designed to be a meaningful and creative exercise. Do ensure the child is involved with your guidance.

General guidelines:

- Summer vacation starts from 1st June'22 up to 03rd July'22. School will reopen on Monday 4th July'22.
- The holiday homework is available online on our websites: www.doonbharti.in & www.doonbharti.com
- Students are to complete HHW in a separate HHW note book / worksheet or as per given direction.
- Activities of each subject carries 2% total weightage in first term.

FOR THE PARENTS

Be A Friend: Play games with your child like – Ludo, Carrom-board or Scrabble.

Explore Nature: Take your child for morning walk, count trees, cars, stones, flowers etc. while going for a walk.

LANGUAGE DEVELOPMENT

Story Time: Read stories, recall some characters and incidents of the story by writing summary of story & character of sketches of different characters of story.

Use magic words like.

“Thank You” “Please” “Excuse me” and “Sorry”

Best Wishes

PHYSICAL EDUCATION **Holiday Homework (2022-2023)**

ACTIVITY: 1

PRACTICAL FILE WORK:

- Practical-1: Fitness tests administration.
- Practical-2: Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.
- Practical-3: Anyone game of your choice out of the list. (Basketball, Football, Kabaddi, Kho-Kho, Volleyball, Handball, Hockey, Cricket) Labelled diagram of field & equipment (Rules, Terminologies & Skills).

ACTIVITY: 2

- Learn five yoga asanas and Make a short video of five asanas and send it to class whats app group

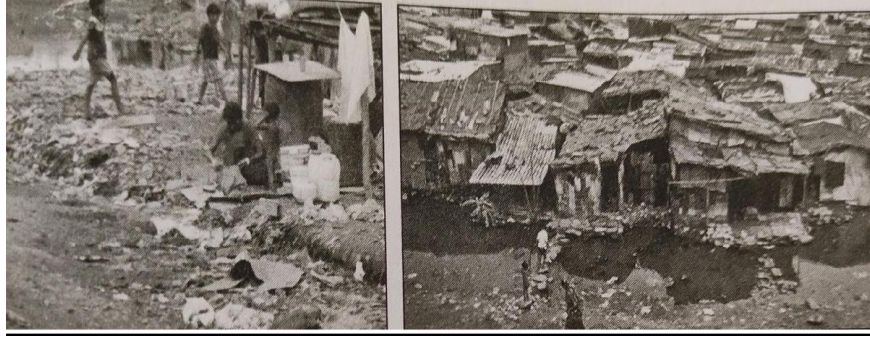
ENGLISH
Holiday Homework (2022-2023)

Instructions:-

1. Utilize your summer vacation constructively. Read good books / English newspaper daily. Obey your parents & help them. Be in touch with your subjects. Learn 5 new words with meaning daily.
2. All summer assignments must do in a Holiday homework notebook.

Writing Article:-

- Q. 1.** In India, the urban poor live in sub-human conditions in slums. Write an article on 'Possible Steps to Deal with Slums in India'. You are Kundan or Kashish, City Reporter of a newspaper. You can take help from the following visual. **(Word limit: 120 – 150)**



Writing Letter to the Editor:-

- Q. 2.** Admission to higher education is becoming increasingly difficult with cut-off lists for admission to universities and colleges constantly rising. Write a letter in about **120 – 150** words to the editor of a national newspaper voicing your concern over the issue.

In your letter you should

Writing Application for Job:-

- give instances of cut-off lists going up, in some cases touching 100% marks
- say how it will make higher education go beyond the reach of the majority of students who score less
- suggest what should be done to ensure that the benefits of higher education opportunities reach the maximum number of people

- Q. 3.** You are Rita / Rajesh Arora from 67-B, Shanti Park, Meerut. You have read an advertisement in 'The Times of India' for the post of Librarian given by Willow Public School, Meerut. Write an application to apply for the post. Also give a detailed bio-data separately. **(Word limit: 120 – 150)**

Writing Notice:-

- Q. 4.** The NCC Air Wing of your school is organising a visit to an Air Force Station in your area. As the senior under Officer of the wing write a notice in not more than **50** words for all the cadets informing them

In your notice you should include the following information:

- * date, time and place of the visit
- * purpose of the visit e.g. air show, flying, study aircraft, interaction with Air Force personnel (Choose one only)
- * Special instructions e.g. packed food and water, venue and time of reporting for the visit, compulsory participation (Choose one only)

about the visit.

Drafting Advertisement:-

- Q. 5.** You are Rohit Gupta, Managing Director of Gupta and Sons, a CA Firm in Kamala Nagar, Delhi. You want to appoint Audit Assistant and Computer Operators for your company. Draft an advertisement in not more than **50** words, giving all the necessary details of qualifications and experience required.

Physics
Holiday Homework (2022-2023)

Chapter 1 Electric Charges And Field

1. A free pitch ball a and it gram carries are positive charges of $5 \times 10^{-8} \text{C}$ what must be the nature and magnitude of charge that should be given to second pitch ball the fixed at 5 cm below the former was so that the upper ball is stationary.
2. Two equal positive charges each $2 \mu\text{C}$ interact with a third positive charge of $3 \mu\text{C}$ situated at shown calculate the magnitude and direction of force on the $3 \mu\text{C}$ charge.
3. Two fixed point charges positive and negative units are separated by a distance a where should the third point charge be placed for it to be in equilibrium?
4. S_1 and S_2 Hollow concentric spheres in closing q $2q$ respectively as shown in figure
 1. What is the ratio of the electric flux through S_1 and S_2 ?
 2. How will the electric flux through the sphere S_1 change if a medium of electric constant 5 is introduced in the space inside S_1 in place of air?
5. An electric field is uniform and in the positive X direction positive X and uniform with the same magnitude in the negative X direction for negative X it is given that a circular cylinder of length 20 cm and radius 5 cm has it at the origin and its Axis along the x -axis so this one face it at X equal plus 10 cm and the other is at $X = -10 \text{ cm}$
 1. What is the net outward flux through each flat face?
 2. What is the flux through the side of the cylinder?
 3. What is the net outward blocks through the cylinder?
 4. What is the net charge inside the cylinder?
6. Derive an expression of electric field intensity at point on equatorial axis of an electric dipole.
7. Show that the force on each plate of a capacitor has a magnitude equal to $qe/2$ where Q is recharge on the capacitor capacitor and e is the magnitude of the electric field between the plates of the capacitor explain the origin of factor $1/2$
8. Two small identical electrical dipoles ab and CD each of the dipole moment " p " are kept at an angle at 120 degree as shown in figure what is the resultant dipole moment of the electric field E directed along $+X$ Direction What will be the magnitude and direction of the torque acting on this.
9. Two small sphere each of mass $M \text{ kg}$ and you coulomb are suspended form a point by insulating thread each of 1 M length but of negligible mass if θ is angle which each string makes with the vertical when equilibrium has been reached so that $Q^2 \text{ equal } 4 mg l^2 \sin^2 \theta \tan \theta$. ($4\pi\epsilon_0$).

Chapter 2 Electric Potential And Capacitance

1. Can a metal sphere of radius 1 cm hold a charge of 1 coulomb ? Justify your answer
2. the electrostatic potential necessarily zero at a point where the electric field strength is zero give an example to illustrate your answer .
3. work done by a electrostatic field is independent of the path followed between two point. Justify.
4. Define the term polarization of dielectric medium write its si unit
5. Four capacitors are connected as soon in figure calculate the equivalent capacitance.
6. The space between the plates of capacitor C is filled with the three dielectric slab of equal thickness find the new capacitance.
7. The space between the plate of capacitor of capacitance C filled with three electric slab of equal thickness find the new capacitance.
8. Find the equivalent capacitance.
9. Find the P, d between a and b
10. What is the capacitance of the arrangement
11. Determine the charge and voltage across each capacitance

Project work (any two)

1. Make a project file on study of charging and discharging of capacitor.
2. To study and compared to capacitor under series and parallel combination
3. to study the working and application of galvanometer

**Note : Make a formula sheet of
chapter 1 to 3**

Subject-Chemistry
Holiday Homework (2022-2023)

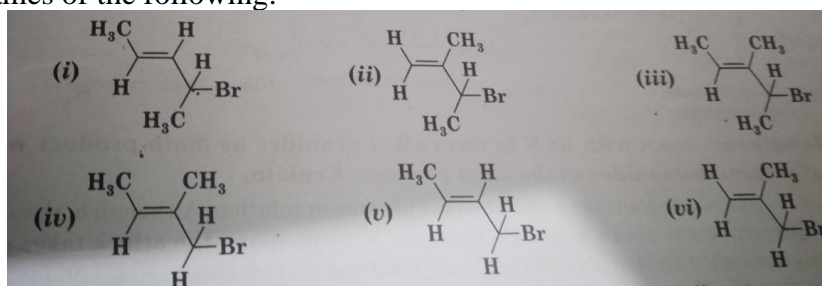
Project:- Prepare the given project in project file-

- 1) Colligative properties [Roll no 1-3]
- 2) Study the quantity of casein present in different samples of milk [Roll no 4-6]
- 3) Optical properties of haloalkanes [Roll no 7-10]
- 4) Content of cold drinks available in market [Roll no 11-13]
- 5) Study of adulteration in food stuffs [Roll no 14--17]

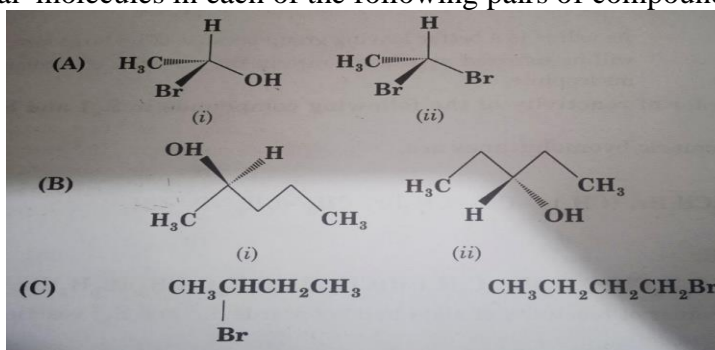
Note Book Work:-

Do these questions in holiday homework notebook

1. Write the IUPAC names of the following:-



2. Identify chiral and achiral molecules in each of the following pairs of compounds:



3. How the following conversions can be carried out

- (i) Propene to propan-1-ol
- (ii) Ethanol to but-1-yne
- (iii) 1-Bromopropane to 2-bromopropane
- (iv) Toluene to benzyl alcohol
- (v) Benzene to 4-bromonitrobenzene
- (vi) Benzyl alcohol to 2-phenylethanoic acid
- (vii) Ethanol to propanenitrile
- (viii) Aniline to chlorobenzene
- (ix) 2-Chlorobutane to 3, 4-dimethylhexane
- (x) 2-Methyl-1-propene to 2-chloro-2 methylpropane
- (xi) Ethyl chloride to propanoic acid
- (xii) But-1-ene to *n*-butyliodide
- (xiii) 2-Chloropropane to 1-propanol
- (xiv) Isopropyl alcohol to iodoform
- (xv) Chlorobenzene to *p*-nitrophenol

Subject – Biology
Holiday Homework (2022-2023)

Project:- Prepare the given project in project file-

- 1) “Oxygen is playing vital role during these pandemic days”. [Roll no-1-2]
- 2) “No Drugs” . [Roll no-3-4]
- 3) “Pollination and its importance”. [Roll no -5-6]
- 4) Contraceptive methods “ IUD is shaping the field of contractive research.[Roll no 7-8]
- 5) Environmental issues ,”Global warming/Climatic changes”.

Chart paper work:-

Make a collage on chart paper-

Emasculation and Bagging techniques in the field of agriculture.

***Report:-** Visit to a near by dairy farm and make a compile project file (pictures must be pasted)”Group activity” including-

- I) Nutrition and caring of cattle’s
- II) Vaccination
- III) Sanitation
- IV) Reproductive problems.

***Note Book work:-**

Do it in the holiday homework notebook

1. Practice all the important pictures(diagrams) of ch-2 & 3 with well labelled diagrams marked in the class.
2. Practice the case based questions from side book of ch-2 and write.

Mathematics
Holiday Homework (2022-2023)

1. Solve the following Question in your Holiday home work notebook.

i). If matrix have 28 elements what are the possible orders it can have? What if it has 13 elements?.

Find the value of x if

$$[x \ 1]_{1 \times 3} \begin{bmatrix} 1 & 3 & 2 \\ 2 & 5 & 1 \\ 15 & 3 & 2 \end{bmatrix}_{3 \times 3} \begin{bmatrix} 1 \\ 2 \\ x \end{bmatrix}_{3 \times 1} = O.$$

ii).

Find non-zero values of x satisfying the matrix equation

$$x \begin{bmatrix} 2x & 2 \\ 3 & x \end{bmatrix} + 2 \begin{bmatrix} 8 & 5x \\ 4 & 4x \end{bmatrix} = 2 \begin{bmatrix} x^2 + 8 & 24 \\ 10 & 6x \end{bmatrix}.$$

iii).

iv). Area of a triangle with vertices $(k, 0)$, $(1, 1)$ and $(0, 3)$ is 5 unit. Find the value (s) of k . 20. If A is a v).

Square matrix of order 3 and $|A| = -2$, find the value of $|-3A|$.

vi). If $A = 2B$ where A and B are of square matrices of order 3×3 and $|B| = 5$. What is $|A|$?

vii). What is the condition that a system of equation $AX = B$ has no solution.

viii). Find the area of the triangle with vertices $(0, 0)$, $(6, 0)$ and $(4, 3)$.

ix). Let A be a non-singular square matrix of order 3×3 find $|\text{adj } A|$ if $|A| = 10$.

Find the matrix A satisfying the matrix equation:

$$\begin{bmatrix} 2 & 1 \\ 3 & 2 \end{bmatrix} A \begin{bmatrix} -3 & 2 \\ 5 & -3 \end{bmatrix} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

x).

xi). Given a square matrix A of order 3×3 such that $|A| = 12$ find the value of $|A \text{ adj } A$.

xii). Find the value of x such that the points $(0, 2)$, $(1, x)$ and $(3, 1)$ y collinear.

2. Project work:-

- i) Make a project based on matrix and determinants.
- ii) Make a project based on inverse Trigonometry Function (graphically).

3. Do Practice Questions (any ten) of each Chapter from “Together with” matrix, Determinants and inverse trigonometry function in your notebook.



DOON BHARTI PUBLIC SCHOOL

Class – XII

Session:- (2022-2023)

CPT – 1 Date Sheet & Syllabus

DATE SHEET OF CPT – 1

DATE	DAY	SUBJECT	DATE	DAY	SUBJECT
11-07-2022	Monday	English	22-07-2022	Friday	Physics/Accountancy/ Pol. Science
15-07-2022	Friday	Biology/Maths/Hindi	25-07-2022	Monday	Chemistry/B.St./History
18-07-2022	Monday	Economics	29-07-2022	Friday	Physical Education

Syllabus

English (Reader):- Flamingo

- Chapter- 1 (The Last Lesson)
- Chapter - 2 (Lost Spring)

Poem:

- My Mother at Sixty – six
- Keeping Quiet

Vistas:

- Chapter – 1 (The Third Level)
- Chapter – 2 (The Tiger King)

English (Grammar):-

- Unseen Passage
- Notice
- Article
- Formal invitation

Economics: Macro Economics

- Ch – 5 Money
- Ch – 6 Banking

Indian Economic Development

- Ch – 1 Indian economy on the eve of Independence

Accountancy:

- V-I- Ch – 2 Accounting for Partnership firm
- Ch- 3 Change in profit sharing ratio among the existing partner

Business Studies:

- Ch – 1 Nature & significance of management
- Ch – 2 Principles of management

Maths :

- Ch-1 Matrices
- Ch-2 Determinant's
- Ch-3 Inverse trigonometry function

Physical Education:

- Ch-1 Management of sport events
- Ch-2 children and women in sports

Hindi (R) :- गद्य

- पाठ – 1 भक्तिन
- पाठ – 2 बाजार दर्शन

काव्य:

- पाठ – 1 आत्मपरिचय, एक गीत

Hindi (Grammar) :-

- पाठ – 1 विभिन्न माध्यमों के लिए लेखन
- पाठ – 2 पत्रकारिता

लेखन कार्य :-

- अनौपचारिक पत्र
- फीचर
- अपठित गद्यांश

Political Science:

- World Politics: Ch-2 The end of bipolarise
- Indian Politics: Ch-1 Challenges of nation building

History:

- Brick, Beads and bones; The Harappan civilisation
- Kings, Farmer and Towns: early states and economics.

Physics:

- Ch-1 Electric charge and field
- Ch-2 Electrostatic potential
- Ch-3 current electricity

Chemistry:

- Ch-10 Halo alkanes and Haloarenes

Biology:

- Ch-2 Sexual reproduction in flowering plant