

Holiday Homework



- BRANCH
- NAME
- CLASS
- SECTION



General Instructions:

- Parents are requested to encourage their wards to complete their Holidays Homework on time.
- All the written work should be done in school notebooks only.
- Holidays Homework should be completed as per the teacher's instructions.
- Students are instructed to do the work in neat and clean handwriting.
- Parents can be facilitators at home but the work should be done independently by the child in his/her own handwriting.
- Holidays Homework should be seen as an interesting activity that helps in the mental and physical development of the child.
- 'Knowledge is Power' Encourage your child to cultivate the reading habit.
- Parents are requested to inculcate in them good manners, healthy habits, and respect for elders.
- Converse with your children in English.

HOLIDAY HOMEWORK

CLASS – XII SCIENCE

PHYSICS

Revise the Ch- Magnetic Effects of Current and Magnetism and do back exercise questions of this chapter from NCERT book in notebook. Also do the following questions in notebook.

- Current carrying wire produces
 - Only electric field
 - only magnetic field
 - both electric field and magnetic field
 - none of the above
- If a copper wire carries a direct current, the magnetic field associated with the current will be
 - Only outside the wire
 - only inside the wire
 - both inside and outside the wire
 - neither inside nor outside the wire
- A coil of wire has an area of 600 cm^2 and has 500 turns. If it carries 1.5 A current, its magnetic dipole moment is
 - 5 Am^2
 - 15 Am^2
 - 30 Am^2
 - 45 Am^2
- Two particles A and B having equal charges 6 C , after being accelerated through the same potential difference, enter a region of uniform magnetic field and describe circular paths of radii 2 cm and 3 cm respectively. The ratio of mass of A to that of B is
 - $4/9$
 - $9/5$
 - $9/4$
 - $1/3$
- Static charge is a source of _____ but not of _____.
- If current through a circular coil flows in clockwise direction, then the direction of magnetic field at the Centre of circular coil is _____ to the plane of the coil, directed _____.
- Ampere's law is applicable for _____ current distribution whereas the Biot- Savart's law is applicable for _____ current distribution.
- The magnetic field produced due to current carrying solenoid is same as is due to a _____.
- When a charged particle is projected perpendicular to the magnetic field, the force acting on the charged particle is _____ of the radius of circular path but _____ the speed of the charged particle.
- The dimensions of $\mu_0/4\pi$ is _____.

CHEMISTRY

- Alcohols are comparatively more soluble in water than ethers of comparable molecular masses. Explain why?
- ortho-Nitro phenol & para-nitro phenol are separated from each other by steam distillation. Name the isomer which is steam volatile. Give reason also.
- What are ambident nucleophiles? Explain with an example.
- Why the chloroform is stored in dark coloured bottles?
- Arrange the following amines in decreasing order of their pK_b values:
(1) $\text{C}_2\text{H}_5\text{NH}_2$, $\text{C}_6\text{H}_5\text{NH}_2$, $\text{C}_6\text{H}_5\text{NHCH}_3$, $(\text{C}_2\text{H}_5)_2\text{NH}$.
- Distinguish between the following organic pairs with the help of suitable chemical test:
 - Chloro benzene and cyclohexylchloride
 - Phenol and ethanol.
- Write short notes on the following with one example of each:
 - Friedel-Craft's reaction
 - Sand Meyer's reaction
- Explain the following:
 - Phenoxide ion is more stable than alkoxide ion.
 - ortho-Nitro phenol is more acidic than ortho-Methoxy phenol.
- Write the mechanism of acid catalyzed hydration of alkenes to yield alcohol.
- Arrange the following in increasing order of their property indicated against it;
 - Pentan-1-ol, butan-1-ol, butan-2-ol, ethanol, propan-1-ol, methanol (boiling point)
 - $\text{ClCH}_2\text{CH}_2\text{COOH}$, $\text{CH}_3\text{CH}_2\text{COOH}$, $(\text{CH}_3)_2\text{CHCOOH}$, CH_3COOH (acidic strength)
- Account for the following:
 - Aldehydes undergo nucleophilic addition reactions more easily than ketones.
 - Grignard reagent should be prepared under anhydrous conditions.
 - Methyl phenyl ether reacts with HI to give phenol and methyl iodide and not iodo benzene and methyl alcohol.
- Explain the following terms:
 - Aspirin
 - 2,4-DNP
 - Recemic modification
- How will you carry out the following conversions?
 - Ethane to butane
 - Aniline to Benzoic acid
 - Propan-2-ol & 2-Methyl propan-2-ol
- How will you carry out the following conversions?

a) Bromoethane to butane b) Aniline to chlorobenzene c) Benzyl chloride to benzyl alcohol
Make a project on A4 size sheet. Topic: Caffeine content present in different brands of Tea and Coffee.

BIOLOGY

Do question answer of Ch 6. Do work sheet of Ch 2,3,4,5 and 6

Draw diagram fig:- 2.3 (a), 2.3(b), 2.5, 2.7 (a) and (d), 2.8, 2.9 (c), 2=11, 2.12(c) and (d), 2.13, 2.14, 2.15(a), 3.1 (a) and (b), 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.12, 3.11 (g) and (e), 4.4 (a) and (b), 6.4 (a).6.5, 6.7, 6.8, 6.10, 6.11, 6.14

Learn and revise Ch 2 to 6

ENGLISH

1- Read a storybook and write Book Review in detail mentioning the summary, characters, language etc.

2- Write Article on the topic " The impact of Pandemic on the World Economy and Education

3- Write a Report on your visit to an Old Age Home mentioning the poor condition of these.

Make a beautiful file and do your homework on designer sheets.

PHYSICAL EDUCATION

Q1. What do you mean by intramurals ?

Q2. What do you mean by extramurals ?

Q3. What do you mean by dieting ?

Q4. What do you mean by food intolerance ?

Q5. What is hypertension ?

Q6. What do you understand by diabetes ?

Q7. What is the full form of WADA ?

Q8. What is the full form of IOC ?

Q9. What do you mean by Bulimia ?

Q10. What do you mean by Anorexia ?

MATHS

1. Do Worksheet of Chapters 01, 02, 05 in your notebook

2. Solve All examples and miscellaneous exercise of Ch 01 to Ch 06 in your notebook

3. Make a chart of all trigonometric formula of Ch 02

4. Make a chart of modulus function , one-2 , onto, signum, greatest integer function with their graphs

HINDUSTANI MUSIC VOCAL

Unit- 1

Brief study of the following-

Alnakar अलंकार

Meed मींड

Khatka खटका

Murki मुर्कि

Gamak गमक

Brief study of the following

Gram ग्राम murchhana मुर्छना Alap अलाप Taan तान