

Holiday Homework

Class XI

English

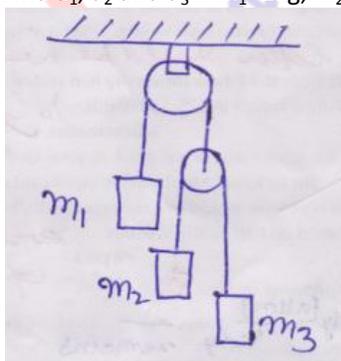
1. Write a letter to any teacher/coordinator/principal in the school whom you consider as your ideal. Give reasons why the person is your ideal. What qualities of him/her do you want to imbibe? Mention one significant contribution of the person for you. How would you remain connected with him/her after you have passed out from the school. How would you reciprocate his/her contribution towards you?
(The letter should be neatly written and submitted to your respective class teachers in a sealed envelope having the name of the teacher whom you have selected as your ideal.)
2. Your school is holding a poster making competition on "Children should not use mobile phones". Draft a suitable poster as your entry for the competition.
3. You are pained to see the plight of stray animals in the streets. Write an article for the newspaper on the need of looking after such animals.
4. Regular practice of yoga can help in maintaining good health and even in the prevention of many ailments. Write a speech in 150-200 words to be delivered in the morning assembly on the usefulness of Yoga.
5. Your school is organising the CBSE Cluster next month. Draft a notice for your school notice board and mention all the details of programme.
6. A few teachers and students from the Edwin University had visited your school on the CBSE Cluster programme. You welcomed them grandly. Write a report in 125-150 words.

Mathematics

1. Prepare NCERT Questions based on half yearly Syllabus.

Physics

1. Define C,m and obtain the following relation $\vec{r}_{C.m} = \frac{m_1\vec{r}_1 + m_2\vec{r}_2}{m_1 + m_2}$
2. Prove that energy of a free falling body always remains constant. Draw the graph of the result.
3. What are elastic and inelastic collision.
 - a. Obtain velocity after elastic collision in one direction.
 - b. Find the loss in energy after inelastic collision.
4. State and prove work energy theorem.
5. Prove that $K.E. = \frac{p^2}{2m}$.
6. Define conservative and non conservative forces. Prove that gravitational force is a conservative force.
7. Find time of flight, maximum height and range of an angular projectile.
8. Prove by vector and calculus method $a_c = \frac{v^2}{r}$.
9. Define dot and cross product of vectors. Prove that $|\hat{a} + \hat{b}| = 2\cos\frac{\theta}{2}$
10. Give geometrical meaning of cross product.
11. Find a_1 , a_2 and a_3 if $m_1=1\text{kg}$, $m_2=2\text{kg}$ and $m_3=3\text{kg}$.



Chemistry

1. Define limiting reagent.
2. How many grams of Oxygen(O_2) are required to completely react with 0.2 gram of Hydrogen(H_2) to yield water(H_2O). Also calculate the amount of water formed.

- The density of 3M solution of NaCl is $1.25 \text{ g mol L}^{-1}$. Calculate the molality of the solution.
- Explain with example: isobar and isotope.
- What is isoelectronic species? Explain with example.
- Calculate the mass of a photons of sodium light having wavelength 5894 \AA and velocity $3 \times 10^8 \text{ m/s}$, $h = 6.63 \times 10^{-34} \text{ m}^2/\text{s}$.
- Write the electronic configuration of Cu_{29} and Nb_{41} .
- Out of F & Cl which has more E_a value and why.
- Draw Str of PCl_5 an all angles are equal explain.
- Which has more dipole moment NH_3 of NF_3 and why?

Biology

- Justify the statement "Double fertilization and triple fusion occurs in angiospermic plant.
- What is five kingdom classifications? What are the five kingdoms? What are the basis of five kingdom classifications?
- When and where does reduction division takes place in angiosperm and gymnosperm?
- What is heterospory? Give examples of two pteridophytes that are showing heterospory. What is significance of heterospory.
- What do you mean by phyllotaxy? Classify it. Write the significance of phyllotaxy.
- Write floral formula of family fabaceae.
 - Write floral characters of family fabaceae.
 - Write the economic importance of family fabaceae.
 - Draw a diagram i.e. floral diagram of family fabaceae.
- What is secondary growth? Describe the secondary growth in dicot stem.
- Differentiate between-
 - Substrate level of phosphorylation & oxidative phosphorylation.
 - Cyclic photophosphorylation & non cyclic photophosphorylation.
- What is Kranz anatomy? How a C_3 -cycle is different from C_4 -cycle.
- What is RQ? In which food stuff the value of RQ will be one, less than one and more than one?
- What is the most accepted theory of ascent of sap? Describe the theory in brief.
- What is photoperiodism? Define the suitable example of each:
 - Long day plant
 - Short day plant
 - Day neutral plant
- What is photorespiration? Write the name of cell organelles involved in photorespiration. What is significance of photorespiration in plant?
- Explain the phenomena of differentiation dedifferentiation and redifferentiation with suitable example in plants.

Economics

- Make project on Primary Data and Secondary Data. Project should contain
 - Meaning of Primary Data and Secondary Data.
 - Methods of collecting Primary Data and Secondary Data.
 - A note on census of India.
 - Difference between Primary Data and Secondary Data.

Note: use suitable Picture & Data related to the project. Do it in a file.

Business Studies

- Give a comparison among Business, Profession and Employment.
- Give a comparison among sole proprietorship, Partnership, Company and Co – operative societies.
- Explain the formation process of a company
- Distinguish between e – business and traditional business .
- Write down the correct answer of all questions of Half yearly exam 2017
- Complete the project work given.

Accountancy

- Complete the project work given.
- Solve the numerical of bills of exchange given in NCERT.
- Solve all the questions of Half yearly Examination 2017.

4. Name the two important methods of providing depreciation and distinguish them.
5. Distinguish between cash discount and Trade Discount.
6. Distinguish between Books of primary entry and secondary entry.

Computer Science

1. Differentiate between entry and exit control loop.
2. Write a program to input a number and display its factorial.
3. Write a program to input two numbers and display a^b .
4. Write a program to display series like 1 2 4 8 16 32.....
5. Write a program to input a number and check whether it is prime or not.

Informatics Practices

1. Differentiate between entry and exit control loop.
2. Write a program to input a year and check whether it is leap or not.
3. Write a program to input a number and check whether it is prime or not.
4. Write a program to display series like 1 2 4 8 16 32.....
5. Write a program to input a number and display its factorial.

Hindi

- अपने कार्यक्रमों के द्वारा अंधविश्वासों और रूढ़िवादी विचार धारा का प्रचार करने वाले दूरदर्शन चैनल के बारे में अपनी राय व्यक्त करते हुए किसी प्रतिष्ठित समाचार-पत्र के संपादक को पत्र लिखिए।
- विज्ञापनों की लुभावनी दुनिया विषय पर 150 शब्दों में एक आलेख प्रस्तुत कीजिए।
- शहर में यातायात जाम की भयंकर समस्या से संबंधित एक रिपोर्ट तैयार कर के यातायात पुलिस अधीक्षक को भेजिए। (150 शब्दों में)

Sanskrit

- अपठित अनुच्छेद पठित्वा प्रश्नान् उत्तरत- 'ऋतिका' पाठ्यपुस्तकात् - (कमपि एक)
- पत्रलेखनम् - मंजूषायाः सहायतया संस्कृतेन पत्रे रिक्त स्थानानि पूरयत- (कमपि एक)
- व्याकरणात् -
पाठाधारितम् पाठ-1-पाठ-5 पर्यन्तम् । सन्धि -सन्धि विच्छेदं वा कुरुत ।
- उपपद विभक्ति-
उचित विभक्तिपदैः रिक्तस्थानानि पूरयत
पाठ्यपुस्तकात् - पेज-111 और 112 पर्यन्तम् ।
- धातुरूपाणि: -
उचित धातुरूपैः रिक्तस्थानानि पूरयत-
पाठ्यपुस्तकात् -पेज- 101 और 102 पर्यन्तम् ।
- संस्कृत -साहित्य परिचय:-
वेदाः, उपनिषदः, पुराणम्, रामायणम्, महाभारतम्, इति विषये संस्कृतेन पंच वाक्येषु अनुच्छेदं लिखत ।

Sector -V/B, B.S.City