



LOYOLA CONVENT SCHOOL

Vidyalaya Marg, Dumardaga, Booty, Ranchi

Session: 2023-24

Durga Puja & Chhath Puja Holiday Homework

Class-IX

ENGLISH

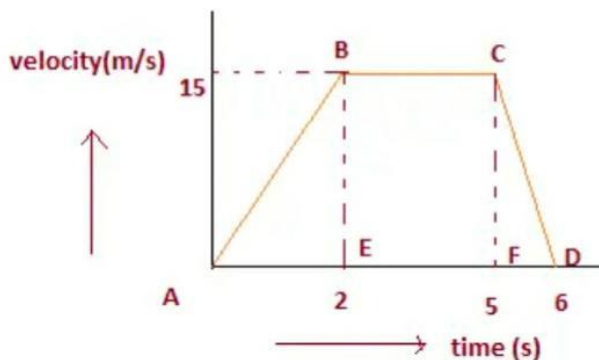
1. Pull out worksheet pg no 142, 143, 144, 145 (Reading section)
2. Pull out worksheet pg no 146, 147, 148, 162, 163, 164, 165 (Grammar & Writing section)
3. Do Unit 8 page no 126 from Workbook Project 2. Posters, slogans and charts to be made relevant to the project and paste it in a stick file.

MATHEMATICS

1. Lab Manual – Activity – 6, 7, 8, 9, 10.
2. Make a list of different types of Quadrilaterals and write the properties of each. Also give two examples of each quadrilateral from real life.
3. Make a list of all algebraic identities with proof giving one example of each.
4. Write all the laws of exponent with one example of each.
5. Prepare a chart on square root & cube root from 1 to 50.
6. Make a list of all the criteria of congruency.

PHYSICS

1. Prepare a chart related to all the formulas of the chapters :
 - A. Motion
 - B. Gravitation
 - C. Force and Laws of Motion
 - D. Thrust and Pressure
2. Write an experiment in your holiday homework copy showing Archimedes Principle.
3. Solve the following problems in your holiday homework copy :
 - A. A nail is driven into a wooden board by using a hammer. The impact of the hammer on the head of nail produces a thrust of 25 N. If the area of the head is 0.5 mm^2 and of the tip 0.1 mm^2 , find the pressure on the head and the tip of the nail.
 - B. The pressure due to atmosphere is $1.013 \times 10^5 \text{ Pa}$. Find the force exerted by the atmosphere on the top surface of a table 2.0 m long and 1.0 m wide.
 - C. Relative density of gold is 19.3. The density of water is 1000 kg/m^3 . Find the density of gold in SI unit in g/cc ?
 - D. Acceleration due to gravity at Height H above earth surface is half of the value of Acceleration due to gravity at the surface. What is the value H in terms of R where R is radius of Earth.
 - E. A truck travelling at 54 km/h is slow down to 36 km/h in 10 sec. Find the retardation.
 - F. A particle experiences constant acceleration for 20 seconds after starting from rest. If it travels a distance D_1 in the first 10 seconds and distance D_2 in the next 10 seconds then,
 - (a) $D_2 = D_1$
 - (b) $D_2 = 2D_1$
 - (c) $D_2 = 3D_1$
 - (d) $D_2 = 4D_1$
 - G. The velocity -time graph of SUV is given below. The mass of the SUV is 1000 kg.
 - a. What is the distance travelled by the SUV is first 2 seconds?
 - b. What is the braking force at the end of 5 seconds to bring the SUV to a stop within one seconds?



CHEMISTRY

1. Write down the achievement of Mounji G. Bawendi, Louis E. Brus and Alexei I. Ekimov who are awarded the Nobel Prize in Chemistry 2023?
2. Write down postulates of Dalton atomic theory.
3. Draw the atomic structure of atoms from Hydrogen to Calcium.
4. You visited your Grandparents home during vacation and heard that climate has changed very much. Write down all possible reasons for this climate change.
5. Justify the following
 1. Desert coolers are more effective during summer seasons.
 2. Water kept in earthen pot cools down.

BIOLOGY

1. Explain different kinds of white blood cells with their function. Draw their diagrams.
2. Describe the function of vaccine with reference to corona vaccine. Also explain plasma therapy.
3. Describe natural resources with examples. Explain each resources in details.
4. Explain the role of M.S Swaminathan in green revolution in india. 5. What is bone marrow? Explain its types and function and importance. Where do we find bone marrow?

HINDI

1. कृत्रिम बुद्धिमत्ता (Artificial intelligence) का दौर विषय पर संकेत बिंदु के आधार पर 100 से 120 शब्दों में अनुच्छेद लिखें।(संकेत बिंदु- कृत्रिम बुद्धिमत्ता क्या है कैसे काम करती है ? , वर्तमान में इसका प्रचार प्रसार अधिक कैसे हुआ?इसके लाभ और खतरे, हमारे जीवन पर प्रभाव)
2. आपके क्षेत्र के पार्क को कूड़ा दान बना दिया गया था | अब पुलिस की पहल और मदद से पुनः बच्चों के लिए खेल का मैदान बन गया है। अतः आप पुलिस आयुक्त को धन्यवाद पत्र लिखिए।
3. आप मोहित (mohit1998@gmail.com)की ओर से नगर निगम अधिकारी (nnigamchandigarh.com) को ईमेल लिखकर तेज गति से मोटरसाइकिल चलाने वालों पर पाबंदी लगाने का आग्रह कीजिए।
4. कक्षा 12 के बादअपने भविष्य की योजना परअपने मित्र के साथ संवाद लिखिए।

SANSKRIT

संप्रेषणात्मक संस्कृतव्याकरण तथा अभ्यास पुस्तिकाया: आदर्श प्रश्न 1,2 & 3 खण्ड 'क', 'ख' एवम् ग पाठ्यक्रमानुसार पुस्तिकायाम् एव लिखत।

CIVICS AND ECONOMICS

Prepare a Project Report on topic India's G20 Presidency: An Opportunity to Steer the World Toward Inclusive and Sustainable Growth : "Vasudhaiva Kutumbakam "

Prepare a project on topic poverty as a challenge to Indian Economy.

Pointers:

1. A separate project of 5 to 8 pages shall be made for all the subjects.
(Acknowledgement, Content, Certificate, Conclusion and Bibliography shall not be a part of the pages mentioned above.)
2. Every project should be put in a stick file.
3. Only Project paper must be used.
4. All the Cover Pages should be handmade. (Computer generated Cover pages shall not be submitted)
5. All duly completed project works should be submitted after vacation.
6. Only Blue pens shall be used for writing and coloured pens for decoration.

HISTORY AND GEOGRAPHY

- Q1. Prepare a project on "Disaster management - mitigation of Earthquake.
- Q2. Discuss why Nazism became popular in Germany by 1930s.
- Q3. Give a detail life sketch of Hitler.
- Q4. Explain the unifying role of monsoon in India.
- Q5. On the outline map of India label different types of forests.

INFORMATION TECHNOLOGY

- 1) Write different shortcut keys used in OpenOffice Writer (At least 15)
- 2) Explain about Mail Merge in details. Also write the steps to perform it.
- 3) Explain about the different cases in Digital Documentation. Give the examples of it.