

CLASS IX : PROJECT WORKS/ASSIGNMENTS

Session : 2019 – 20

IMPORTANT INSTRUCTIONS:

1. All students have to complete a certain number of assignments or projects in all subjects within the stipulated time in fulfillment of the requirement of their preparation for the Class- X Board Examinations.
2. The project/assignments are part of the internal assessment; the marks awarded and are added in the final report card. Good marks in project is one of the criteria for deciding the promotion of the next class
3. All assignments are to be submitted according to the date mentioned in the list.
Deduction will be done for late submission. Marks are awarded for the Preparation, Presentation, Timely Submission and analysis of the Topic.
4. No leave of absence will be permitted for preparing project or assignment.

Subject	Topic	Date Of Submission
Biology	<ol style="list-style-type: none">1. Structure of a bisexual flower, function of various parts.2. Complete and incomplete flower3. Self and cross- pollination, advantages and disadvantages of self and cross-pollination.4. Agents of pollination and characteristic features of flowers pollinated by – Insects, wind, and water.5. Events between pollination and fertilization, formation of zygote in embryo sac.6. Structure of seeds- monocot and dicot, Germination of seeds and condition for seed germination.	04/07/2019
English – II	<p style="text-align: center;">Drama</p> <p>Write the dramatic significance of the opening scene in the play. 'The Merchant of Venice.' with special reference to the reason behind the melancholic mood of Antonio in not more than 500 words.</p> <p style="text-align: center;">Poetry</p> <p>How can trees save the earth from Global Warming and climate change? Write it in not more than 500 words.</p> <p style="text-align: center;">Short story</p> <p>State the narrator's attitude towards the old man. Give evidence from the story to support your answer in not more than 500 words.</p>	04/07/2019
Hindi	<p>Q1 A</p> <p>दिए गए विषयों पर 250 शब्दों में निबंध लिखिए। आपके विद्यालय में एक मेले का आयोजन किया गया था। यह किस अवसर पर किस उद्देश्य से किया गया था। उसके लिए आपने क्या – क्या तैयारियां की ? आपने और आपके मित्रों ने एवं शिक्षकों ने उसमें क्या सहयोग दिया था ? इन बिंदुओं को आधार बनाकर एक प्रस्ताव लिखिए।</p> <p>B</p> <p>यात्रा एक उत्तम रुचि है। यात्रा करने से ज्ञान तो बढ़ता ही है , स्थान विशेष की संस्कृति तथा परम्पराओं का परिचय भी मिलता है। अपने किसी यात्रा के अनुभव तथा रोमांच का वर्णन एक प्रस्ताव लिखिए।</p> <p>C</p> <p>एक मौलिक कहानी लिखिए जिसका अंत प्रस्तुत वाक्य से किया गया हो – और मैंने राहत की सांस लेते हुए सोचा कि आज मेरा मानव जीवन सफल हो गया।</p> <p>Q2 A</p> <p>निम्नलिखित विषयों पर हिंदी में लगभग 120 शब्दों में पत्र लिखिए। आपने अपने परिवार के साथ किसी एक प्रदर्शनी को देखने गए थे। वहां पर आपने</p>	05/07/2019

<p>B</p> <p>Q3</p> <p>A</p> <p>B</p> <p>C</p> <p>Q4</p> <p>A</p> <p>B</p> <p>Q5</p> <p>A</p> <p>B</p>	<p>क्या – क्या देखा ? वहां कौन – कौन सी चीजें ने आकर्षित किया ? जीवन में उनकी क्या उपयोगिता है ? अपना अनुभव बताते हुए अपने प्रिय मित्र को पत्र लिखिए</p> <p>दिन – प्रतिदिन बढ़ते हुए जल संकट की ओर ध्यान आकर्षित करते हुए नगर पालिका के अध्यक्ष को एक पत्र लिखिए। जिसमें वर्षा के जल का संचयन करने के लिए व्यापक स्तर पर परियोजना चलाने का सुझाव दिया गया हो।</p> <p>दिए गए निर्देशानुसार प्रश्नों का उत्तर लिखिए</p> <p>पृष्ठ संख्या 221 (1 – 25) संज्ञा शब्द से भाववाचक शब्द बनाना। (सरस हिंदी व्याकरण)</p> <p>पृष्ठ संख्या 237 (1 – 10) शब्द से विशेषण बनाना। (सरस हिंदी व्याकरण)</p> <p>पृष्ठ संख्या 252 (1 – 20) दो – दो पर्यायवाची शब्द बनाना। (सरस हिंदी व्याकरण)</p> <p>पद्य (साहित्य सागर)</p> <p>कबीर दास का जीवन परिचय देते हुए उनकी प्रमुख कृतियों एवं काव्यगत विशेषताओं पर प्रकाश डालिए।</p> <p>‘स्वर्ग बना सकते हैं’ कविता के कवि का जीवन परिचय देते हुए कविता का सप्रसंग केंद्रीय भाव लिखिए।</p> <p>गद्य (साहित्य सागर)</p> <p>‘ बात अठन्नी की ’ नामक कहानी की शीर्षक की सार्थकता तथा सारांश अपने शब्दों में लिखिए।</p> <p>‘महायज्ञ का पुरस्कार’ नामक कहानी का सन्देश / उद्देश्य स्पष्ट करते हुए बताइए कि इस कहानी से आपको क्या शिक्षा / सीख मिलती है।</p>	
<p>Geography</p>	<p>Select any topic and prepare detail report (not more than 20 pages) Collection of data from secondary sources (using modern techniques i.e. GPS, remote sensing, Aerial photography and satellite imageries) prepare proper power point presentation on current issues like dangers of development and ecological disasters like droughts, earthquakes, volcanoes floods, landslides, cyclones and tornadoes in the world.</p> <p style="text-align: center;">Or</p> <p>Area studies: choose any aspect from section B (world studies) and prepare a power point presentation or a write up on it.</p>	<p>06/07/2019</p>
<p>Physics</p>	<ol style="list-style-type: none"> 1- Describe ‘Vernier callipers’ and ‘Screw Gauge’ with its various parts and labeled diagram. 2- Do the graphical constructions (ray diagram) of images formed in spherical mirrors (convex & concave), with the characteristics of the image. 3- State the Law of floating. Describe metacentre. Give in brief the stable, unstable and neutral equilibrium with labeled diagrams. 4- Explain with labeled diagram of magnetic field due to a bar magnet in earth’s magnetic field- <ol style="list-style-type: none"> a) When north pole of a bar magnet points towards geographic north. b) When north pole of a bar magnet points towards geographic south. 	<p>11/07/2019</p>
<p>Chemistry</p>	<p>Write project on any one of the following topics- Atomic structure and chemical bonding</p> <ol style="list-style-type: none"> 1. Definition of an atom. 2. Constituents of an atom , nucleus (proton, neutron) 	

	<p>With associated electron : mass number atomic number.</p> <ol style="list-style-type: none"> Electron distribution in the orbits $2n^2$ rule. Octet rule reason for chemical activity of an atom. Electro valent bond : Definition, atomic orbit structure for the formation of electrovalent compounds NaCl , MgCl₂ , CaO Covalent bond: Definition, Atomic orbit Structure for the formation of covalent molecules on the basis of duplet and octet of electrons (Examples: Hydrogen chloride, oxygen, nitrogen, hydrogen chloride , water, ammonia, carbon tetrachloride methane.) <p style="text-align: center;">OR</p> <p style="text-align: center;">ATMOSPHERIC POLLUTION</p> <ol style="list-style-type: none"> Acid rain- Composition, cause, and its impact. Sulphur in fossil fuels giving oxides of sulphur when burnt . High temperatures in furnaces and internal combustion engines produce oxide of Nitrogen (Equation to be included) Acid rain affects soil chemistry and water bodies. Global Warming. Greenhouse gases –their sources and ways of reducing their presence in the atmosphere. Ozone depletion Formation of ozone-relevant equations Function in the atmosphere Destruction of the ozone layer- chemical responsible For this to be named but reaction not required. 	11/07/2019														
Mathematics	<ol style="list-style-type: none"> (a) The height of 240 student of a school are measured and tabulated as below. <table border="1" data-bbox="321 968 1300 1108" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Height(in cm)</td> <td style="text-align: center;">Below 100</td> <td style="text-align: center;">Below 110</td> <td style="text-align: center;">Below 120</td> <td style="text-align: center;">Below 130</td> <td style="text-align: center;">Below 140</td> <td style="text-align: center;">Below 150</td> </tr> <tr> <td style="text-align: center;">No. of student</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> <td style="text-align: center;">55</td> <td style="text-align: center;">180</td> <td style="text-align: center;">218</td> <td style="text-align: center;">240</td> </tr> </table> <p>Construct a frequency distribution table for the above data . Also answer the following –</p> <ol style="list-style-type: none"> How many students have at least 1 m height but less than 120 cm height? How many students have at least have 130 cm height. <p>(b) Explain the representation of statistical data with Bar graphs, Histogram and frequency polygon with each examples of each.</p> <ol style="list-style-type: none"> (a) Write the formulas of perimeter and area of different types of triangle and quadrilateral with diagram. (b) Write the formulas of surface area, curved surface area and volume of cylinder cone with diagram. <ol style="list-style-type: none"> Prove the trigonometrical identity- <ol style="list-style-type: none"> $\sin^2\theta + \cos^2\theta = 1$ $1 + \tan^2\theta = \sec^2\theta$ $1 + \cot^2\theta = \operatorname{cosec}^2\theta$ 	Height(in cm)	Below 100	Below 110	Below 120	Below 130	Below 140	Below 150	No. of student	15	30	55	180	218	240	15/07/2019
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History & civics	<p style="text-align: center;">Write about the following Monuments,</p> <ol style="list-style-type: none"> Qutub Minar Buland Darwaza The Red Fort The Taj Mahal <p style="text-align: center;">Or</p> <p style="text-align: center;">Explain the fundamental rights of the citizens of India</p>	26/08/2019														

Computer Application	<p style="text-align: center;">Section A</p> <ol style="list-style-type: none"> 1) Explain The Increment and Decrement Operators with at least 5 examples of each. 2) Explain different types of Literals along with the data types and sizes and ranges 3) Explain the different characteristics of Object Oriented Programming 4) Explain the term Type conversion. Explain the different types of operators with examples. 5) Explain the terms primitive data types, referenced data type and composite data types with proper example and workings 	14/10/2019
	<p style="text-align: center;">Section B</p> <ol style="list-style-type: none"> 6) Write a program to print whether a number is Perfect, abundant or deficient number . 7) Write a menu driven program to print the pattern 1 and pattern 2 <ul style="list-style-type: none"> <pre style="margin-left: 40px;"> 1 . 2 1 3 2 1 4 3 2 1 n terms 1 2 3 4 5 6 7 8 9 10 n terms </pre> 8) Write a menu driven program using switch case to print whether a number is Palindrome , Prime ,or Pronic 9) Write a program by using switch case to print the following <ol style="list-style-type: none"> i) 0, 1, 1, 2, 3, 5, 8, 13, n terms ii) $s = 1 + \frac{x}{1!} + \frac{x^2}{2!} + \frac{x^3}{3!} + \dots n \text{ terms (Sum of the series)}$ 10) Write a program to input a number and print whether it is an even or odd, if it is an even print its Factors otherwise print its factorial. 	