

**BETHANY CONVENT SCHOOL, NAINI PRAYAGRAJ**  
**HOLIDAY HOMEWORK XII-NM (2026-2027)**

SUBJECT	TOPIC
ENGLISH	*English Project File*
	Watch /Read and prepare a file on any selected topic of your choice.
	1. Any documentary
	2. A biography of any inspiring or motivational figure
	3. Life of any Any Real Life Hero
	4. Any Selected Novel recently read
	5. Any Advocative (For or Against) Movie (Avoid any religious or controversial movie)
Hindi	<p>1.पुस्तक समीक्षा विषय: किसी एक हिन्दी उपन्यास/कहानी संग्रह की समीक्षा</p> <p>उदाहरण: 'गोदान' 'गुनाहों का देवता' 'नमक का दरोगा' अथवा आपकी पसंदीदा उपन्यास लेखक आदि।</p> <p>बिंदु: लेखक परिचय कथावस्तु मुख्य पात्र भाषा शैली आपकी प्रतिक्रिया</p>
	<p>2.हिन्दी और रोजगार</p> <p>विषय: "हिन्दी भाषा में करियर की संभावनाएँ"</p> <p>बिंदु: पत्रकारिता अनुवाद शिक्षण कंटेंट राइटिंग रेडियो/टीवी आदि।</p>
	<p>3.साक्षात्कार आधारित परियोजना</p> <p>विषय: "मेरे जीवन को प्रेरित करने वाला व्यक्ति"</p> <p>निर्देश: किसी शिक्षक, अभिभावक, किसान, सैनिक अथवा सेवा निवृत्त स्त्री और पुरुष आदि का साक्षात्कार लें।</p> <p>प्रश्नोत्तर शैली में लिखें। उनसे मिली सीख लिखें। परियोजना कार्य हेतु सामान्य निर्देश:- परियोजना हस्तालिखित हो। सुंदर आवरण पृष्ठ बनाएं। अनुक्रमणिका अवश्य जोड़ें।</p>

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	<p>चित्र/कटिंग/चार्ट का प्रयोग करें।  शब्द सीमा: लगभग 1200-1500 शब्द।  अंत में निष्कर्ष एवं संदर्भ स्रोत लिखें।</p>
<b>Chemistry</b>	<p><b>Prepare a scientific investigatory project involving laboratory testing and collecting information from research journals (which involves about 10 periods of work) on the topics assigned as per your Roll No.</b></p> <p>1. Study of the presence of oxalate ions in guava fruit at different stages of ripening. (Roll No. 1,9,17,25,33,41, 48)  2. Study of quantity of casein present in different samples of milk. (Roll No.2,10,18,26,34,42,49)  3. Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature etc. (Roll No-3,11, 19,27,35,43)  4. Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, concentration, time, etc.) (Roll No-4, 12,20,28,36,44)  5. Study of digestion of starch by salivary amylase and effect of pH and temperature on it (5,13,21,29,37,45)  6. Comparative study of the rate of fermentation of following materials, wheat, flour, gram flour, potato juice, carrot juice, etc. (Roll No-6,14,22,30,38,45,46)  7. Extraction of essential oils present in Saunf (Aniseed), Ajwain (carum), Elaichi (cardamom). (Roll No-7, 15,23,31,39,46,)  8. Study of common food adulterants in fat, oil, butter, sugar, turmeric powder, chilli powder, and pepper (Roll No-8,16,32,40)</p>
	1. To study various factors on which the internal resistance/EMF of a cell depends. (Roll No. 1,9,17,25,33,41, 48)
	2. To study the variations in current flowing in a circuit containing an LDR because of a variation in (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance). (Roll No.2,10,18,26,34,42,49)
	3. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle. (Roll No-3,11, 19,27,35,43,50)
	4. To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer. (Roll No-4, 12,20,28,36,44,51)
	5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids. (Roll No. 5,13,21,29,37,52)
	6. To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law. (Roll No-6,14,22,30,38,45,53)
	7. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor / (bulb) in a circuit fed up by an AC source of adjustable frequency. (Roll No-7, 15,23,31,39,46,)
<b>PHYSICS</b>	
<b>Maths</b>	<b>A. Complete the following activities in maths lab file.</b>
	1. To demonstrate a function which is not one-one but onto.
	2. To demonstrate a function which is one-one but not onto.

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<b>Maths</b>	<p><b>B. Make a file of collection of all important formulae and definitions given in every chapter of class 12 mathematics.</b></p> <p><b>C. Complete project on use of trigonometry, derivatives and integration in space science and industrial mechanism.</b></p>
<b>IP</b>	<p><b>Prepare a PYTHON project file which will have the following programs:</b></p> <ol style="list-style-type: none"> <li>1. Create a pandas series from a dictionary of values and an ndarray.</li> <li>2. Given a Series, print all the elements that are above the 75th percentile.</li> <li>3. Create a Data Frame quarterly sales where each row contains the item category, item name, and expenditure. Group the rows by the category, and print the total expenditure per category.</li> <li>4. Create a data frame based on ecommerce data and generate descriptive statistics (mean, median, mode, quartile, and variance).</li> <li>5. Create a data frame for examination result and display row labels, column labels data types of each column and the dimensions</li> <li>6. Filter out rows based on different criteria such as duplicate rows.</li> <li>7. Find the sum of each column, or find the column with the lowest mean.</li> <li>8. Locate the 3 largest values in a data frame.</li> <li>9. Subtract the mean of a row from each element of the row in a Data Frame.</li> <li>10. Replace all missing values in a data frame with a 999.</li> <li>11. Replace all negative values in a data frame with a 0.</li> </ol>
<b>YOGA</b>	<p>Project Topics : yogic management</p> <ul style="list-style-type: none"> <li>* Hypertension</li> <li>* Obesity</li> <li>* back pain</li> <li>* asthma</li> <li>* Bandha benefits</li> <li>* concept of Diet</li> <li>* Explain all part Bahirang and antranga yoga</li> </ul> <p>Explain the following</p> <ul style="list-style-type: none"> <li>* physical health</li> <li>* mental health</li> <li>* social health</li> <li>* spiritual health</li> </ul>