# WOODLAND OVERSEAS SCHOOL
*An International School*

## CBSE PROJECT / PRACTICAL FILE ASSIGNMENT
## Grade: 12 Humanities Stream (Session: 2023 - 2024)

### ENGLISH:

1. Project can be made on any one topic based on current issue / idea.
2. The ideas highlighted in the Chapter / Poem / Dramas given in the prescribed books can also be developed in the form of a project.
3. The project can be made individually or with a group of 3 – 4 students.
   The project – Portfolio may include the following:
   - Cover page with title of Project, School details / Details of students
   - Statement of Purpose / Objectives / Goals.
   - Certificate of Completion under the Guidance of the teacher.
   - Action plan for the Completion of the assigned tasks.
   - Materials such as scripts for the theatre / role play / questionnaires for interviews / written assignments, essay / survey reports.
   - Word capacity 800 – 1000 (essay / script / report).
   - Student / Group reflection.
   - If possible Photographs that capture the learning experiences of the students (s).
   - List of Resources / Bibliography.

### POLITICAL SCIENCE: Make any one project on below mentioned topic:

**Project 1  :** Key Agencies: UNESCO, UNICEF, ILO, WHO Security Council
**Project 2  :** India's changing relation with other nation: US, Russia, China and Israel.

### LEGAL STUDIES: Make project on any one topic out of below mentioned topics:

**Project 1  :** Human Right in India.
**Project 2  :** Tribunal Adjudication.

### ECONOMICS: Make project on any one topic out of below mentioned topics:

**Project 1  :** Government Budget and its Components.
**Project 2  :** Money its types and Functions.
**Project 3  :** Bank its types and Instruments.
**Project 4  :** National Income and its Methods.

### PSYCHOLOGY: Make project on any 01 topic out of below mentioned topics:

**Project 1  :** Psychological impact of violence on women and children.
**Project 2  :** Impact of Socio Economic status on Mental Health.
**Project 3  :** Influence of Domestic Violence on Adolescent Academic Performance.
**Project 4  :** Increase in level of frustration among teenagers.

### PHYSICAL EDUCATION: Prepare Practical File. It should consist of following practicals:

A. Physical Fitness Test:
   - SAI Khelo India Test.
   - Brockport Physical Fitness Test.
B. Asanas:
   Write procedure, benefits and contraindication of any two Asanas for each life style disease.

C. Write any one game of your choice out of the list below mentioned games with labelled diagram of field and equipment (Rules, Terminologies and Skills).
   a) Football       b) Kabaddi       c) Volleyball       d) Cricket
   e) Hockey       f) Kho-Kho       g) Handball       h) Basketball
   i) Badminton       j) Swimming

## MATHEMATICS:

1. To verify that the relation R in the set L of all lines in a plane, defined by $R = \{(\ell, m) : \ell \perp m\}$ is symmetric but neither reflexive nor transitive.
2. To verify that the relation in the set L of all lines in a plane, defined by $R = \{(\ell, m) : \ell \| m\}$ is an equivalence relation.
3. To demonstrate a function, which is not one – one but is onto.
4. To demonstrate a function, which is one – one but not onto.
5. To find analytically the limit of a function $f(x)$ at $x = c$ and also to check the continuity of the function at that point.
6. To understand the concepts of decreasing and increasing functions.
7. To understand the concepts of local maxima and local minima.
8. To construct on open box of maximum volume from a given rectangular sheet by cutting equal square from each corner.
9. To verify geometrically that - $\vec{c} \times (\vec{a} + \vec{b}) = \vec{c} \times \vec{a} + \vec{c} \times \vec{b}$
10. To measure the shortest distance between two skew lines and verify it analytically.

## APPLIED MATHEMATICS:

1. Prepare a questionnaire to collect information about money spent by your friends in a month on activities like travelling, movies, recharging of mobiles etc. And draw interesting conclusion.
2. Analysis of career graph of a cricketer (batting average for a batsman and bowling average for a bowler). Conclude the best year of his performance. It may be extended for other players also – tennis, badminton, athlete etc.

## INFORMATICS PRACTICES:

1. Create a pandas series from a dictionary of values and an ndarray.
2. Given a Series, print all the elements that are above the 75th percentile.
3. Create a Data Frame quarterly sales where each row contains the item category, item name, and expenditure. Find shape and count of rows and columns.
4. Create a data frame based on ecommerce data and generate descriptive statistics (mean, median, mode, quartile, and variance).
5. Create a data frame for examination result and display row labels, column labels data types of each column and the dimensions.
6. Filter out rows based on different criteria such as duplicate rows.
7. Find the sum of each column, or find the column with the lowest mean.
8. Locate the 3 largest values in a data frame.
9. Subtract the mean of a row from each element of the row in a Data Frame.
10. Replace all negative values in a data frame with a 0.
11. Replace all missing values in a data frame with a 999.
12. Importing and exporting data between pandas and CSV file.
13. Importing and exporting data between pandas and MySQL database.
14. Create a Dataframe with 3 rows and 2 columns and iterate it row wise.