

ENGLISH

SUBJECT-ENGLISH CORE (301)

CLASS-XII

PROJECT WORK

Project work is to be prepared as per the instructions listed below.

1. The entire project should be in a file format.
2. The project should be handwritten in blue/black pen (Highlighters can be used).
4. The project report should be developed in the following sequence–
 - Cover page: School Name, logo, Title statement, Name of the Student and Year/session
 - Index (list of contents)
 - Acknowledgements and Preface
 - Certificate
 - Introduction statement (The purpose of the Project)
 - Detailed Project
 - Learning outcomes/experiences



The project should have illustrations/photos/sketches as per the need and suitability with respect to the pattern of the presentation

With reference to the chapter 'Lost Spring' express your views on 'Child labour – a scar on humanity that needs to be eradicated'.

(Refer to the global situation with respect to poverty and the measures implemented to substantiate your views.)

PAINTING

Answer the following questions :

1. "A group of polo players, all mounted on horse - backs with polo-sticks in their hands."
 - Identify the painting included in your course of study and write its title and medium.
 - Mention the sub school of this painting, describe its compositional arrangement in your own words.
2. In the Basohli school, the coordination of ornamental form of nature and elements of folk art is seen together, which was filled with reverence and devotion by the painters of Basohli.
 - From your course of study identify the painting of Basohli school and write its title and name of the painter.
 - Describe the artistic features of the painting in your own words.

PROJECT WORK

1. Still Life:-

- A) Pencil Shade -01
- B) Water Colour - 01

2. Madhubani Painting -01

3. Mandala Art – 01

4. City Scape – 01







5. Composition : 01

- A) Your Favourite Festival.

PHYSICAL EDUCATION

1. As our school prepares to host the DAV Zonal Sports (Athletics) event, we are looking to ensure effective coordination and execution. Could you plan the event and outline the roles and responsibilities of the various committees involved in the pre-event, during-event, and post-event phases? (3)

2. Match the followings: (3)

<u>Column – A</u>	<u>Column - B</u>
 a.	i. pes planus
 b.	ii. S- or C-shaped
 c.	iii. genu valgum
 d.	iv. swayback
 e.	v. hunchback
 f.	vi. genu varum

3. As you're tasked with preparing fixtures for the DAV Zonal Football tournament involving 7 teams, which type of tournament would you use to ensure that each team has equal opportunities to compete and showcase their skills? What are the disadvantages of that type of tournament? (2)

4. What does the term 'amenorrhea' refer to? (1)

- | | |
|---------------------------------|---------------------------------|
| A) Excessive menstrual bleeding | B) Absence of menstrual periods |
| C) Irregular menstrual cycles | D) Painful menstrual periods. |

5. In sports tournaments, what does a "bye" signify? (1)

- A) A temporary break during the game
- B) A forfeit by one of the teams
- C) An automatic advancement to the next round without competing
- D) A tiebreaker match between two teams

Project Work:

IOA recognized Sport/Game: Volleyball or Football or Kho-Kho (any one)

1. Labeled diagram of Field
2. Equipments
3. Rules of Game
4. Terminologies
5. Skills

Note:

Use Inter leaf page to write your project.

Paste and Draw relevant picture (Use White sheet or page)

Project should be completely hand written.

Project should have the following:

1. Index
2. Acknowledgement
3. Introduction to the topic
3. Content of the project
4. Conclusion
6. Bibliography

Follow all the instructions given in class related to the project work.

STANDARD MATHEMATICS**PROJECT WORK(use shoelace file)**

1. To verify that the relation R in the set L of all lines in a plane, defined by $R = \{(l, m) : l \perp m\}$ is symmetric but neither reflexive nor transitive.
2. To draw the graph of $\sin^{-1}x$, using the graph of $\sin x$ and demonstrate the concept of mirror reflection (about the line $y = x$). (Use mm graph)
3. To sketch the graphs of a^x and $\log_a x$, $a > 0$, $a \neq 1$ and to examine that they are mirror images of each other.
4. To understand the concept of decreasing and increasing functions.
5. To understand the concepts of local maxima, local minima and point of inflection.

FORMAT TO BE FOLLOWED:-

a)1st Page-Name of the school, Investigatory Project, name, class, section,roll number, subject, Guide teachers' name

b)2nd Page-Certificate

c)3rd Page-Acknowledgement

d)4thPage-Index

APPLIED MATHEMATICS

PROJECT WORK(use shoeless file)

1. Each day the newspaper tells us about the maximum temperature, minimum temperature and humidity. Collect the data for a period of 15 days and represent it graphically. Compare it with the data available for the same time period for the previous year. (To be given to the students)
2. Matrix multiplication and inverse of matrix using spreadsheet.

FORMAT TO BE FOLLOWED:-

a)1st Page-Name of the school, Investigatory Project, name, class, section,roll number, subject, Guide teachers' name

b)2nd Page-Certificate

c)3rd Page-Acknowledgement

d)4thPage-Index

PHYSICS

A. Prepare an investigatory project: Submit the draft of an investigatory project as per the topic allocated (groupwise) in class.

Follow the given format:-

a)1st Page-Name of the school, Investigatory Project, name of the student, class, section, Board roll no., subject, Guide teachers' name

b)2nd Page-Certificate

c)3rd Page-Acknowledgement

d)4thPage-Index

e)5thPage-Aim/Objective

f)6th Page onwards-Project Report

g)Conclusion

h)Bibliography

Important points to note:-

Maximum no.of page should not exceed 20

Project is to be written in shoelace file

#Project should be handwritten

Pictures/diagrams(coloured) may be pasted

SUGGESTED TOPICS FOR THE INVESTIGATORY PROJECT:

1. To study various factors on which the internal resistance/EMF of a cell depends.
2. 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.
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.
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.
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.
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.

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 A.C. source of adjustable frequency.
8. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

B. Write the following Activities:

1. To assemble a household circuit comprising three bulbs, three (on/off) switches, a Fuse and a power source.
2. To assemble the components of a given electrical circuit.
3. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.
4. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.

CHEMISTRY

Activity/Practical :

AISSCE INVESTIGATORY PROJECT 2024-25

Investigatory project topics for class XII

1. Sterilization of water using bleaching powder
2. To determine the amount of acetic acid in different type of vinegar.
3. Determination of caffeine in a tea sample.
4. Presence of Casein in different milk sample.
5. Determine the hardness of water from different sources.
6. Determination of contents of cold drinks.
7. Neutralization ability of different antacids.
8. Fermentation of fruit juices.

FORMAT TO BE FOLLOWED:-

a)1st Page-Name of the school, Name of Investigatory Project, Student name, class, section,roll number, subject.

b)2nd Page-Certificate

c)3rd Page-Acknowledgement

d)4thPage-Index

e) Project main content

f) Bibliography.

NOTE : A.To prepare the INVESTIGATORY PROJECT(any one) use shoelace file of DAVCAE .

B.PROJECT MUST BE HAND WRITTEN & FIRST 3 PAGES MUST BE PRINTED.

A.)PREPARE AN INVESTIGATORY PROJECT.

Follow the given format:-

- a)**1st Page**-Name of the school, Investigatory Project, name of the student, class, section, Board roll no., subject, Guide teachers' name
- b)**2nd Page**-Certificate
- c)**3rd Page**-Acknowledgement
- d)**4thPage**-Index
- e)**5thPage**-Aim/Objective
- f)**6th Page onwards**-Project Report
- g)**Conclusion**
- h)**Bibliography**

Important points to note:-

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SUGGESTED TOPICS FOR THE INVESTIGATORY PROJECT

- 1.Pollination-its types
- 2.Assisted Reproductive Technologies
3. Infertility and Testtube baby
- 4.Genetic Disorders-Mendelian & Chromosomal
- 5.Immunity-its types
- 6.AIDS
7. CANCER
- 8.Drugs and Alcohol abuse
9. Microbes in Human welfare
- 10.Biotechnological Applications in Agriculture
- 11.Biotechnological Applications in Medicine
- 12.Population Interactions in Ecosystem
- 13.Biodiversity-its loss and conservation
- 14.Environmental issues-Air pollution, Water pollution,, Solid wastes, Radioactive wastes
- 15.Study of adaptation of plants and animals in aquatic conditions
16. Study of adaptation of plants and animals in xerophytic conditions

B.)Write the following practicals in your practical copy.

- 1.Prepare a temporary mount to observe pollen germination
- 2.Pollen germination on stigma through a permanent slide or scanning electron

micrograph.

3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides.

4. T.S. of blastula through permanent slides (Mammalian),

5. Study the plant population density by quadrat method.

6. Study the plant population frequency by quadrat method.

7. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc

8. Mendelian inheritance using seeds of different colour/sizes of any plant.

9. Meiosis in onion bud cell or grasshopper testis through permanent slides

10. To study prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.

11. To observe common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.

12. To prepare a temporary mount of onion root tip to study mitosis.

13. To study flash cards showing symbiotic association in root nodules of leguminous plants, Cuscuta on host, lichens. Comment.

14. To study flash cards showing examples of homologous and analogous. Comment.

15. To study controlled Pollination -Emasculation, Tagging and Bagging.

ECONOMICS

Prepare a Project Report on any one topic from the following:

1. Any topic from Macroeconomics
2. Any topic from Indian Economy
3. Any current Economic issue can also be selected.
4. Following topics can also be selected:
 - Micro and Small Scale Industries
 - Food Supply Channel in India
 - Contemporary Employment situation in India
 - Disinvestment policy of the government
 - Goods and Services Tax Act and its Impact on GDP
 - Health Expenditure (of any state)
 - Human Development Index
 - Inclusive Growth Strategy
 - Self-help group
 - Trends in Credit availability in India
 - Monetary Policy Committee and its functions
 - Role of RBI in Control of Credit
 - Government Budget & its Components
 - Trends in budgetary condition of India
 - Exchange Rate determination – Methods and Techniques
 - Currency War – reasons and repercussions
 - Livestock – Backbone of Rural India
 - Waste Management in India – Need of the hour
 - Digital India- Step towards the future
 - Rain Water Harvesting
 - Make in India – The way ahead

Sri Lanka's Economic Crisis
Sustainable Development Goals (SDG's)
New Education Policy (NEP) 2020: A Promise for a New Education System
Cashless Economy

5. Any other newspaper article and its evaluation on basis of economic principles

Note:

Use Interleaf page to write your project .

Paste and Draw relevant picture (Use White sheet or page)

Project should be completely handwritten .

Project should have the following:

Index

1. Acknowledgement
2. Introduction to the topic
3. Content of the project
4. Research work.
5. Conclusion
6. Bibliography

Follow all the instructions given in class related to the project

COMPUTER SCIENCE

1. Write a program to show entered string is a palindrome or not.
2. Write a program to show statistics of characters in the given line(to counts the number of alphabets ,digits, uppercase, lowercase, spaces and other characters).
3. Write a program to show GCD of two positive numbers using function
4. Write a program to input total number of sections and stream name in 11th class and display all information on the output screen.
5. Write a program to swap the content with next value, if it is divisible by 7 so that the resultant array will look like : 3,5,21,6,8,14,3,14.
6. Write a program to show and count the number of words in a text file 'DATA.TXT' which is starting/ended with an word 'The', 'the'.
7. Write a program to read data from a text file DATA.TXT, and display each words with number of vowels and consonants.
8. Write a program to write a string in the binary file "comp.dat" and count the number of times a character appears in the given string using a dictionary.
9. Write a program that will write a string in binary file "school.dat" and display the words of the string in reverse order.
10. Write a program that will write a string in binary file "school.dat" and display the words of the string in reverse order.
