

UNIVERSAL ACADEMY, DEHRADUN SUMMER HOLIDAYS HOMEWORK SESSION 2023-24 CLASS-XII(SCIENCE)

SUBJECT: ENGLISH

PROJECT WORK

Prepare a project file on the following poems:

- a. Aunt Jennifer's Tigers
- b. A Thing of Beauty

The file should comprise of the information about the poems as per the given guidelines:

- 1.) About their poets
- 2.) Theme/Message
- 3.) Summary
- 4.) Look for the poetic devices(any 5) used in the above mentioned poems.
- * Project File needs to be covered with yellow sheet with school logo.
- * It should have the following headings:
- 1. Acknowledgement
- 2. Certificate
- 3. Index
- 4. Introduction
- 5. Content
- 6. Bibliography

SUBJECT: PHYSICS

PROJECT WORK

Make project on the given topic as per Roll no stated below: Class XII A(PCM)

1. Interference of light (1-3)

- 2. Transformer (4-6)
- **3.** Electromagnetic induction(7-9)
- 4. Semiconductor (10-12)
- **5.** Atom (13-15)
- **6.** PN junction diode(16-18)
- 7. Rectifier (19-21)
- 8. AC Generator(22-24)
- 9. Capacitor (25-27)
- **10.** Moving coil galvanometer(28-30)
- **11**. Registers and ohm's law (31-33)
- **12**. Diffraction of light . (34-35)

Make project on the given topic as per Roll no stated below:

Class XII A (PCB)

- 1. Interference of light (1-2)
- 2. Transformer (3-4)
- 3. Electromagnetic induction(5-6)
- 4. Semiconductor (7-8)
- 5. Atom (9-10)
- 6. PN junction diode(11-12)
- 7. Rectifier (13-14)
- 8. AC Generator(15-16)
- 9. Capacitor (17-18)
- 10. Moving coil galvanometer(19-20)
- 11. Registers and ohm's law (21-22)

Note

Project work should be done in thread cardboard file and in white colored practical pages only A project should have the following outline:

- 1. Index, Acknowledgement and Certificate
- 2. Introduction
- 3. Theory and Method & procedure
- 4. Explanation
- 5. Conclusion
- 6. Bibliography

SUBJECT: CHEMISTRY

PROJECT WORK

Make project on the given topic as per Roll no stated below:

- 1. To Study the Effect of Fertilizer on Water(roll no 1 to 5)
- 2. To Study of the Food Adulterants (6 to 10)
- 3. Biodiesel: The future of the Fuel (11 to 15)
- 4. To Study the Hardness of Water (16 to 20)
- 5. Chemicals Affecting the ripening the fruits (21 to 25)
- 6. Is Bottled Water more purified than tap Water? (26 to 30)
- 7. To Study the Effects of the Acid Rain on Plant Growth (31 to 35)

A project should have the following outline:

- 1. Index, Acknowledgement and Certificate
- 2. Objectives
- 3. Introduction
- 4 Method & procedure
- 5. Material and Resources used
- 6. Observation and Data used
- 7. Analysis of Data
- 8. Conclusion
- 9. Limitations
- 10.Bibliography

Note:

Project work should be done in thread cardboard file and in white colored practical pages only Student of class XII (PCB) will do the project till S..No 5.

SUBJECT: BIOLOGY

PROJECT WORK

Make project on the given topic as per Roll no stated below:

- 1. Microbes in human welfare- Roll no.1 to 3
- 2. Reproductive Health- 4 to 6
- 3. Human health and diseases- 7 to 9
- 4. Applications of biotechnology- 10 to 12
- 5. DNA fingerprinting- 13 to 15
- 6. Cancer 16 to 18
- 7. Biodiversity conservation- 19 to 20
- 8. Infertility 21 to 22

Note

Project work should be done in thread cardboard file and in white colored practical pages only A project should have the following outline:

- 1. Index, Acknowledgement and Certificate
- 2. Introduction
- 3. Theory and Method & procedure
- 4. Explanation
- 5. Conclusion
- 6. Bibliography

SUBJECT: MATHS

Do the worksheet in your notebook.

SUBJECT: PHYSICAL EDUCATION

PROJECT WORK

Do the project on any of the following sports

- 1. Badminton
- 2. Kho Kho
- 3. Athletics
- 4. Football
- 5. Volleyball
- 6. Basketball
- 7. Table Tennis

A project should have the following outline:

- **1**. Introduction of the game
- 2. Rules and regulations
- **3.** Ground & field marking
- 4. Measurement
- 5. Related player's name.

SUBJECT: HINDI

.PROJECT WORK

कवितावली पर एक परियोजना तैयार कीजिए। यह कार्य प्रोजेक्ट फाइल में करना है

SUBJECT: INFORMATICS PRACTICE

1. PRACTICAL WORK

All Students need to prepare the Practical File with the following programs.

- 1. Create a pandas series from a dictionary of values and an ndarray.
- 2. Write a Pandas program to perform arithmetic operations on two Pandas Series.
- 3. Write a Pandas program to add some data to an existing Series.
- 4. Write a Pandas program to select the rows where the percentage greater than 70.
- 5. Write a Pandas program to select the rows the percentage is between 70 and 90 (inclusive)
- **6.** Write a Pandas program to change the percentage in a given row by the user.
- 7. Write a Pandas program to join the two given dataframes along rows and assign all data.
- **8.** Write a Pandas program to join the two given dataframes along with columns and assign all data.
- 9. Write a Pandas program to append a list of dictionaries or series to an existing DataFrame and display the combined data.
- **10**. Write a Program to select or filter rows from a DataFrame based on values in columns in pandas (Use of Relational and Logical Operators)

2. PROJECT WORK

Make project on the given topic as per the List stated below:

S.No	Group Topics	Student Name
1	Car Sales Analyzer	1. Aditya Bhardwaj
		2. Vardaan
		3. Advit Singh
2	Analysis Of Crime Record	1. Samiksha
		2. Yashasvi Malik
3	Analysis of Vegetable Price	1. Ojasv Rana
		2. Pranjal Ghildiyal
		3. Aditya Gupta
4	Analysis of Olympics Games	1. Ekash Gupta
5	Analysis of Asiad Games	1. Farhan Ali
6	Growth Of Population in the state of Uttrakhand.	1. Chhavi
		2. Krisha
		3. Palak Sajwan
7	Analysis of Rise of Global	1. Ritesh

	Temp.	2. Nalin
		3. Prabhu
8	Growth of Export and import in india.	1. Harshit Monga
9	Car Sales Analyzer – Model	1. Bhumika
	Wise	2. Siddhi
10	Analysis of Literacy Rate in	Ishika Bansal
	India	

A project should have the following outline:

- 1. Index, Acknowledgement and Certificate
- 2. Objectives
- 3. Introduction
- 4. Problem Statement
- 5. Resources needed
- 6. Source Code
- 7. Screen Shot
- 8. Limitation of the project
- 9. .Bibliography

SUBJECT: PSYCHOLOGY

PROJECT WORK

Prepare a case study of any individual based on the following format:

A project should have the following outline:

- 1. Introduction
- 2. Observation
- 3. Symptoms
- 4. Conclusion
- 5. Suggestion

Dates for submission of Holiday homework

All subjects: 1st JULY 2023 (8 a.m. -11 a.m. Only)

NOTE: Holiday Homework will not be accepted after the dates assigned.