

## ASIAN INTERNATIONAL SCHOOL SUMMER HOLIDAY HOMEWORK CLASS XII SCIENCE

SESSION: 2023-2024

CLIDIECT		TACK ACCIONED	21 of CENTUDY
SUBJECT		TASK ASSIGNED	21st CENTURY
			SKILLS
ENGLISH	of indigo of the British Champara  Gu 1) 2) bea 3) 4) as 1)7 2) 3) 4) 5) 6) 7) 8)	ry of Indigo Cultivation in India: Research the history cultivation in India, including its origins, the impact of a Raj, and the role of Mahatma Gandhi in the in Satyagraha.  **Midelines:**  The work must be done in channel file using A4 paper. Relevant pictures to be used to enhance the autification of the project.  Students must use only black or blue pen.  The chronology to be used while making the project is follows:  Title Page  Acknowledgement  Table of Contents  Introduction of the Topic  Aims and Objectives  Body of the project ( along with pictures)  Conclusion  Bibliography	<ul> <li>Cognitive skills</li> <li>Creative and critical thinking skills</li> <li>Creative skills</li> <li>Writing and analytical skills</li> </ul>
	· ·	Vord Limit - 800- 1000 words)	
PHYSICS	ROLL	PROJECT	Cognitive
	1- 10 11-20	To study various factors on which the internal resistance/EMF of a cell depends.  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). (b) the distance of a incandescent lamp (of fixed power) used to 'illuminate' the LDR.	skills  Creative and critical thinking skills  Reading and listening skills  Creative skills  Writing and analytical skills

20-32	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.	
GUIDE	LINES FOR THE PROJECT	
1. S V 2. F P A II 3. T 4. P C P 5. T C 6. E N 7. A	GENERAL INSTRUCTIONS: TUDENTS SHOULD COMPLETE THE PROJECT VITHIN 15-20 A4 SIZE WHITE PAGES. FIRST FOUR PAGES OF THE PROJECT (COVER PAGE, CERTIFICATE, DECLARATION & CKNOWLEDGEMENT) SHOULD BE INSERTED IN THE PROJECT IN PRINTED FORM. THE BODY OF THE PROJECT SHOULD BE HANDWRITTEN ONLY. THOTOGRAPHS, DIAGRAMS, CHARTS, TABLES, GRAPHS CAN BE DRAWN AS WELL AS CAN BE PASTED. THE PROJECT HAS TO BE SUBMITTED WITHIN CHANNEL FILE. TACH & EVERY PAGE SHOULD BE CONTAINING MARGIN IN ALL SIDES. THE WAYS USE RIGHT HAND SIDE PAGE FOR VICTOR OR DRAWING THE DIAGRAMS, GRAPHS, PICTURES, CHARTS, FLOW CHARTS & THE PROJECT WHERE.	
	ABLES ETC PROJECT FILE FORMAT:	
1. Cover	Page	
2. Ce	rtificate	
3. De	claration	
4. Ac	knowledgement	
5. Ind	lex	
6. Inti	roduction	
7. Ob	jective of the project	
8. Ma	terials and apparatus required	
9. Pro	ocedure	
10. O	bservation	
11. C	alculation (if any)	

12. Conclusion / Result

### **Suggested Books** 1. Physics, Class XII, Part -I and II, Published by NCERT. 2. Laboratory Manual of Physics for class XII Published by **NCERT** 3. Any other relevant authentic source/online **INVESTIGATORY PROJECT-** (any one has to be written): Practical **CHEMISTRY** skills Reasoning skills. 1) • Study of the presence of oxalate ions in guava Complex fruit at different stages of ripening. problem-Study of quantity of casein present in different 2) • solving skills samples of milk. Preparation of soybean milk and its comparison Cognitive with the natural milk with respect to curd formation, skills effect of temperature, etc. Analytical Study of the effect of Potassium Bisulphate as 4) • thinking food preservative under various conditions skills. (temperature, concentration, time, etc.) Study of digestion of starch by salivary amylase 5) • and effect of pH and temperature on it. Comparative study of the rate of fermentation of 6) • following materials: wheat flour, gram flour, potato juice, carrot juice, etc. Extraction of essential oils present in Saunf (aniseed), Ajwain (carum), Illaichi (cardamom). Study of common food adulterants in fat, oil, 8) • butter, sugar, turmeric power, chilli powder and pepper. **GUIDELINES FOR THE PROJECT GENERAL INSTRUCTIONS:** 8. STUDENTS SHOULD COMPLETE THE PROJECT WITHIN 15-20 A4 SIZE WHITE PAGES. 9. FIRST FOUR PAGES OF THE PROJECT (COVER PAGE, CERTIFICATE, DECLARATION & ACKNOWLEDGEMENT) SHOULD BE INSERTED IN THE PROJECT IN **PRINTED FORM**. 10. THE BODY OF THE PROJECT SHOULD BE HANDWRITTEN ONLY. 11. PHOTOGRAPHS, DIAGRAMS, CHARTS, TABLES, GRAPHS CAN BE DRAWN AS WELL AS CAN BE PASTED.

12. THE PROJECT HAS TO BE SUBMITTED WITHIN

13. EACH & EVERY PAGE SHOULD BE CONTAINING

14. ALWAYS USE RIGHT HAND SIDE PAGE FOR

CHANNEL FILE.

MARGIN IN ALL SIDES.

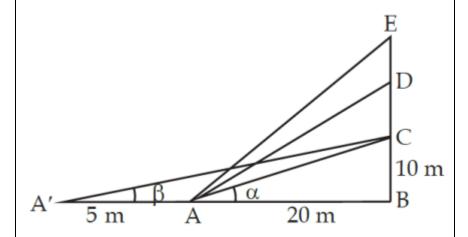
	WRITING & LEFT ONE CAN BE USED FOR PASTING OR DRAWING THE DIAGRAMS, GRAPHS, PICTURES, CHARTS, FLOW CHARTS & TABLES ETC	
	• PROJECT FILE FORMAT: 1. Cover Page	
	2. Certificate	
	3. Declaration	
	4. Acknowledgement	
	5. Index	
	6. Introduction	
	7. Objective of the project	
	8. Materials and apparatus required	
	9. Procedure	
	10. Observation	
	11. Calculation (if any)	
	12. Conclusion / Result	
	13. Bibliography	
MATHEMATICS	Assertion-Reasoning MCQs	• Logical
	Each of these questions contains two statements: Assertion (A) and Reason (R). Each of these questions also has four alternative choices, any one of which is the correct answer. You have to select one of the codes (a), (b), (c) and (d) given below.	thinking skills.  Complex problem-solving skills
	<ul> <li>(a) A is true, R is true; R is a correct explanation for A.</li> <li>(b) A is true, R is true; R is not a correct explanation for A</li> <li>(c) A is true; R is False.</li> <li>(d) A is false: R is true.</li> </ul>	<ul><li>Cognitive skills</li><li>Analytical thinking skills.</li></ul>
	1. Assertion (A) The relation R in the set $A=(1, 2, 3, 4, 5, 6)$ defined as $R=\{(x, y) : y \text{ is divisible by } x\}$ is not an equivalence relation.	
	Reason (R) The relation R will be an equivalence relation, if it is reflexive, symmetric and transitive.	
	2. Assertion (A) If R is the relation defined in set $(1,2,3,4,5,6)$ as $R=\{(a,b): b=a+1\}$ , then R is reflexive.	
	Reason (R) The relation R in the set $\{1, 2, 3\}$ given by R-((1, 2), (2, 1)) is symmetric.	
	3.Let R be any relation in the set A of human beings in a town at	

a particular time.

Assertion (A) If  $R = \{(x, y): x \text{ is wife of } y\}$ , then R is reflexive. Reason (R) If  $R = \{(x, y): x \text{ is father of } y\}$ , then R is neither reflexive nor symmetric nor transitive.

4. The Government of India is planning to fix a hoarding board at the face of a building on the road of a busy market for awareness on COVID-19 protocol. Ram, Robert and Rahim are the three engineers who are working on this project. 'A' is considered to be a person viewing the hoarding board 20 metres away from the building, standing at the edge of a pathway nearby, Ram Robert and Rahim suggested to the film to place the hoarding board at three different locations namely C, D and E. 'C' is at the height of 10 metres from the ground level. For the viewer 'A', the angle of elevation of 'D' is double the angle of elevation of 'C'. The angle of elevation of 'E' is triple the angle of elevation of 'C' for the same viewer.

Look at the figure given and based on the above information answer the following:



- (i) Measure of ∠CAB =
- (a)  $tan^{-1}(2)$
- (b)  $tan^{-1}(1/2)$
- (c)  $tan^{-1}(1)$
- (d)  $tan^{-1}(3)$

### (ii) Measure of ∠DAB =

- (a)  $tan^{-1}(3/4)$
- (b)  $tan^{-1}(3)$
- (c)  $tan^{-1}(4/3)$
- (d)  $tan^{-1}(4)$

#### (iii) Measure of ∠EAB

- (a)  $tan^{-1}(11)$
- (b)  $tan^{-1}(3)$
- (c)  $tan^{-1}(2/11)$

(d)  $tan^{-1}(11/2)$ (iv) A' is another viewer standing on the same line of observation across the road. If the width of the road is 5 meters, then the difference between ∠CAB and ∠CA'B is (a)  $tan^{-1}(1/12)$ (b)  $tan^{-1}(1/8)$ (c)  $\tan^{-1}(2/5)$ (d)  $tan^{-1}(11/21)$ 5. Sherlin and Danju are playing Ludo at home during Covid-19. While rolling the dice, Sherlin's sister Raji observed and noted the possible outcomes of the throw every time belongs to set {1, 2, 3, 4, 5, 6}. Let A be the set of players while B be set of all possible outcomes.  $A = \{S, D\}, B = \{1, 2, 3, 4, 5, 6\}$ Based on the above information answer the following: (i) Let  $R : B \rightarrow B$  be defined by  $R = \{(x, y) : y \text{ is divisible by } x\}$ (a) Reflexive and transitive but not symmetric (b) Reflexive and symmetric but not transitive (c) Not reflexive but symmetric and transitive (d) Equivalence (ii) Raji wants to know the number of functions from A to B. How many number of functions are possible? (a)  $6^2$ (b)  $2^6$ (c) 6! (d)  $2^{12}$ (iii) Let R be a relation on B defined by  $R = \{(1, 2), (2, 2), (1, 2, 2), ($ 3), (3, 4), (3, 1), (4, 3), (5, 5)}. Then R is (a) Symmetric (b) Reflexive (c) Transitive (d) None of these three (iv) Raji wants to know the number of relations possible from A to B. How many numbers of relations are possible? (a)  $6^2$ (b)  $2^6$ (c) 6! (d)  $2^{12}$ (v) Let  $R : B \rightarrow B$  be defined by  $R = \{(1, 1), (1, 2), (2, 2)(3, 3), (2, 2)(3, 3), (2, 2)(3, 3), (2, 2)(3, 3), (3, 2), (4, 2)(3, 3), (4, 2)($ (4, 4), (5, 5), (6, 6)}, then R is (a) Symmetric

	<ul><li>(b) Reflexive and Transitive</li><li>(c) Transitive and symmetric</li><li>(d) Equivalence</li></ul>	
COMPUTER SCIENCE	PROJECT- Management System	<ul><li>Practical skills</li></ul>
SCIENCE	As per CBSE guidelines	Technical
		Expertise.
		<ul><li>Risk</li><li>Managemen</li></ul>
		t.
		• Critical
		Thinking and Problem
		Solving
BIOLOGY	PROJECT (CHOOSE ANY ONE TOPIC) -	• Excellent
	Study on Infertility and its causes and treatment	written communicati
	Human Embryogenesis	on skills.
	DNA fingerprinting	<ul> <li>Logical thinking</li> </ul>
	Genetic Mutation types and its causes	skills.
	Pharmacogenomics of Anti-cancer drugs	<ul><li>Motor skills.</li><li>Initiating</li></ul>
	<ul> <li>Recombinant DNA technology in today's medicine</li> </ul>	skills
	<ul> <li>Designer Baby</li> </ul>	<ul><li>Creativity skills</li></ul>
	<ul> <li>Genetically modified organisms impact on the Ecosystem</li> </ul>	
	Geneticany mounted organisms impact on the Ecosystem	
	GENERAL INSTRUCTIONS FOR THE STUDENTS:	
	> STUDENTS SHOULD COMPLETE THE PROJECT	
	WITHIN 20-25 PAGES.	
	FIRST FOUR PAGES OF THE PROJECT (COVER PAGE, CERTIFICATE, ACKNOWLEDGEMENT &	
	CONTENT) SHOULD BE INSERTED IN THE	
	PROJECT IN PRINTED FORM.  THE BODY OF THE PROJECT SHOULD BE HAND	
	WRITTEN ONLY.	
	> PHOTOGRAPHS, DIAGRAMS, CHARTS, TABLES,	
	GRAPHS CAN BE DRAWN AS WELL AS CAN BE PASTED.	
	<ul> <li>HARDCOPY OF THE PROJECT NEED TO BE</li> </ul>	
	SUBMITTED WITHIN CHANNEL FILE AFTER	

REOPENING THE SCHOOL.

- ➤ EACH & EVERY PAGE SHOULD BE CONTAINING MARGIN IN ALL SIDES.NO DECORATION IS NEEDED FOR THIS PROJECT.
- ➤ ALWAYS USE RIGHT HAND SIDE PAGE FOR WRITING & LEFT ONE CAN BE USED FOR PASTING OR DRAWING THE DIAGRAMS, GRAPHS, PICTURES, CHARTS, FLOW CHARTS & TABLES ETC.
- > CASE STUDY INCORPORATION IN THE PROJECT IS MANDATORY FOR EVERY PROJECT TOPIC.

#### FORMAT FOR THE PROJECT

- 1. COVER PAGE:
- 2. CERTIFICATE OF APPROVAL:
- 3. ACKNOWLEDGEMENT:
- 5. INDEX/CONTENT:
- 6. BODY OF PROJECT: THIS MUST VARY FROM TOPIC TO TOPIC.
- 7. CASE STUDY: THIS POINT SHOULD BE WRITTEN WITHIN 3-4 PAGES.TRY TO GIVE REAL DATA/INFORMATION UNDER THIS POINT.
  8. REFERENCES: HERE YOU CAN WRITE THE BOOKS NAMES FROM WHERE YOU HAVE GATHERED INFORMATIONS AS WELL AS YOU CAN ADD WEBSITES/LINKS ALSO.

#### **PRACTICAL:**

- ➤ Prepare a temporary mount to observe pollen germination.
- ➤ Pollen germination on stigma through a permanent slide or scanning electron micrograph.
- ➤ Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
- T.S. of blastula through permanent slides (Mammalian).

## $\frac{\textbf{BIOLOGY INVESTIGATORY PROJECT ADDITIONAL}}{\textbf{INFORMATIONS}}$

FORMAT OF "COVER PAGE, "CERTIFICATE OF APPROVAL PAGE", "ACKNOWLEDGEMENT PAGE" AND "INDEX/CONTENT PAGE" HAVE BEEN SHARED IN THE NEXT PAGES

ECONOMICS		NAME	PROJECT	<ul> <li>Practical</li> </ul>
	1	MD.MASUM JAFAR	G-20, Inclusive and Action	skills
			Oriented	<ul> <li>Technical</li> </ul>
				Expertise.
				<ul><li>Risk</li></ul>
				Management.

Critical Thinking and Problem Solving  Practical skills. Technical Expertise.
skills. Technical
skills. Technical
Risk Management. Critical Thinking and Problem Solving
actical skills
echnical spertise. sk anagement.
ritical ninking and roblem
olving
Practical
skills
Technical
Expertise.
Risk
Management.
Critical
Thinking and
Problem
Solving
Excellent
written communication

- Automated monitoring system for advanced medical products
- > Block chain based record system
- ➤ Using Rapid Access Multidisciplinary Palliative Assessment to Improve Cancer Patient Experience
- > Tracking Solution For the Logistics in a Hospital in Real-Time

- skills.
- Logical thinking skills.
- Motor skills.
- Initiating skills
- Creativity skills

#### GENERAL INSTRUCTIONS FOR THE STUDENTS:

- > STUDENTS SHOULD COMPLETE THE PROJECT WITHIN 15-20 PAGES.
- ➤ FIRST FOUR PAGES OF THE PROJECT (COVER PAGE, CERTIFICATE, ACKNOWLEDGEMENT & CONTENT) SHOULD BE INSERTED IN THE PROJECT IN PRINTED FORM.
- ➤ THE BODY OF THE PROJECT SHOULD BE HAND WRITTEN ONLY.
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- 1. COVER PAGE:
- 2. CERTIFICATE OF APPROVAL:
- 3. ACKNOWLEDGEMENT:
- 5. INDEX/CONTENT:
- 6. BODY OF PROJECT: THIS MUST VARY FROM TOPIC TO TOPIC.
- 7. REFERENCES: HERE YOU CAN WRITE THE BOOKS NAMES FROM WHERE YOU HAVE GATHERED INFORMATIONS AS WELL AS YOU CAN ADD WEBSITES/LINKS ALSO.

### PRACTICALS-HEALTHCARE:

- Prepare the chart on different types of entries of Patient.
- Preparing and maintaining of the medical record of the sick students who are coming to medical room.

AI	PROJECT- 1. Demonstration of the key aspects of becoming active listener 2. Preparing posters of steps for active listening 3. Demonstration and practice of writing sentences and
	<ul> <li>Demonstration of the key aspects of becoming active listener</li> <li>Preparing posters of steps for active listening</li> <li>Demonstration and practice of writing sentences and paragraphs on topics related to the subject</li> <li>HEALTHCARE PROJECT ADDITIONAL INFORMATIONS</li> <li>FORMAT OF "COVER PAGE, "CERTIFICATE OF APPROVAL PAGE", "ACKNOWLEDGEMENT PAGE" AND "INDEX/CONTENT PAGE" HAVE BEEN SHARED IN THE NEXT PAGES</li> </ul>
	<ul> <li>Preparing medical form (containing personal details and past medical history) for sick students who will come to Medical room.</li> <li>EMPLOYBILITY SKILL:</li> </ul>

**N.B:** Details of the Projects have been uploaded on ERP as well as shared on the official class What'app group.

## ASIAN INTERNATIONAL SCHOOL



# CHEMISTRY INVESTIGATORY PROJECT "NAME OF THE PROJECT"

NAME OF THE STUDENT:

SUBJECT CODE: 043

REGISTRATION NUMBER-

BOARDS ROLL NUMBER:

SCHOOL CODE: 15543

SESSION: 2023-2024

GUIDED BY:

## CERTIFICATE OF APPROVAL

			of Asian International	
Successfully				
	India Senior seco	• • • • • • • • • • • • • • • • • • • •	icate Examination (AIS	As
Date:				
	Princ	ipal's Signat	ure	
Signature of Exter	nal examiner	S	ignature Of Internal	Examiner

# **ACKNOWLEDGEMENT**

I express my special thanks to my principal
& my Chemistry teacher who always gave
me guidance and helped me to know about the project. I had made this project
and research work with utmost sincerity . I am very thankful to all those people
who helped me and guided me to make such a project. I also thank my parents
who have provided me all the resources required to make this project.
Student's name:
Class and section:

# CONTENT/INDEX

SL NO.	POINTS OF THE PROJECT	PAGE NO.

## ASIAN INTERNATIONAL SCHOOL



# BIOLOGY INVESTIGATORY PROJECT "NAME OF THE PROJECT"

NAME OF THE STUDENT:

SUBJECT CODE: 044

REGISTRATION NUMBER-

**BOARDS ROLL NUMBER:** 

SCHOOL CODE: 15543

SESSION: 2023-2024

GUIDED BY:

## CERTIFICATE OF APPROVAL

TII: : : : : : : : : : : : : : : : : : :					
This is to certify that I Student of class					
			investigatory		
prescribed by the <b>All I</b> academic year 2023-20		ary Certific	cate Exam	ination (AISS	SCE) for the
Date:					
		• • • • • • • • • • • • • • • • • • • •			
	Principa	ıl's Signatu	re		
Signature of Extern	al examiner	Si	gnature (	Of Internal I	Examiner

# **ACKNOWLEDGEMENT**

I express my special thanks to my principal
& my Biology teacher who always gave
me guidance and helped me to know about the project. I had made this project
and research work with utmost sincerity . I am very thankful to all those people
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Student's name:
Class and section:

# CONTENT/INDEX

SL NO.	POINTS OF THE PROJECT	PAGE NO.

## ASIAN INTERNATIONAL SCHOOL



# HEALTHCARE PROJECT "NAME OF THE PROJECT"

NAME OF THE STUDENT:

SUBJECT CODE: 813

REGISTRATION NUMBER-

**BOARDS ROLL NUMBER:** 

SCHOOL CODE: 15543

SESSION: 2023-2024

GUIDED BY:

## CERTIFICATE OF APPROVAL

			of Asian International investigatory	
		• • • • • • • • • • • • • • • • • • • •		As
prescribed by the A academic year 2023		ondary Certi	ficate Examination (AIS	SCE) for the
Date:				
	Princ	cipal's Signa	ture	
Signature of Ext	ernal examiner		Signature Of Interna	l Examiner

# **ACKNOWLEDGEMENT**

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Student's name:		
Class and section:		

# CONTENT/INDEX

SL NO.	POINTS OF THE PROJECT	PAGE NO.

## ASIAN INTERNATIONAL SCHOOL



# PHYSICS PROJECT "NAME OF THE PROJECT"

NAME OF THE STUDENT:

SUBJECT CODE: 042

REGISTRATION NUMBER-

**BOARDS ROLL NUMBER:** 

SCHOOL CODE: 15543

SESSION: 2023-2024

GUIDED BY:

## CERTIFICATE OF APPROVAL

This is to certify that Student of class Successfully	section	on of	Asian International	School has
prescribed by the <b>All</b> academic year 2023-2				
Date:				
	Princip	al's Signature		
Signature of Exter		Signa	ature Of Internal	

# **ACKNOWLEDGEMENT**

I express my special thanks to my principal
& my Physics teacher who always gave
me guidance and helped me to know about the project. I had made this project
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## CONTENT/INDEX

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