

QUEENS' COLLEGE, INDORE

SUMMER ASSIGNMENT

WING-MIDDLE

CLASS – X

Queens' College, Indore SESSION 2021-22 Summer Assignment Class –X

ENGLISH

I.Read between the lines(Let us explore the world within)

Have fun and learn together .Read any two books out of given books (pdf attachment available).

1.Who Moved My Cheese

- 2. Ikigai: The Japanese Secret to a Long and Happy Life
- 3. The Adventures of Huckleberry Finn
- 4. The Diary of a Young Girl
- II. One pager (A Book in a word)

Out of the books you read from assignment I ,create your one pager which displays your understanding of its chapters and comprehension(use quotes,learnings,incidents :you can refer the images given below)



III.MY MAZE

Create a crossword or puzzles using the words from the chapters- A Letter to God, Triumph of Surgery , Long Walk to Freedom, A Thief's Story)

Enjoy your holidays

HINDI

परियोजना कार्य ;प्रोजेक्ट वर्क

निम्नलिखित प्रश्नों के आधार पर परियोजना तैयार कीजिए

- कबीर के दोहों में धार्मिक आडम्बरों का विरोध मिलता है, इसका क्या कारण है ? कबीर का संक्षिप्त जीवन परिचय देते हुए पाठ्यपुस्तक के अतिरिक्त कबीर कृत 10 दोहे लिखिए जो आज भी प्रासंगिक हैं |उनसे मिलने वाली शिक्षा भी लिखिए | आप PPT भी बना सकते हैं |
- अपना परिचय देते हुए एक समाचार वाचक की तरह समाचार प्रस्तुत करते हुए एक वीडियो बनाइए |अपनी प्रस्तुति को प्रभावशाली बनाने के लिए आप समाचार से संबंधित चित्र भी दिखा सकते हैं|
- 3. शरीर के भिन्न-भिन्न अंगों पर आधारित कोई 25 मुहावरों का वाक्यों में प्रयोग कीजिए |(अर्थ सहित)
- 4. आप PPT के माध्यम से अपने कार्य को कलात्मक भी बना सकते हैं |
- 5. भारत में साहित्यिक रचनाओं पर आधारित कई फिल्में बनी हैं | ऐसी साहित्यिक रचनाओं पर आधारित
- 6. फिल्मों की सूची तैयार कीजिए। उनमें से किसी एक फ़िल्म की समीक्षा प्रस्तुत कीजिए।

परियोजना कार्य का मूल्यांकन निम्न बिन्दुओं के आधार पर होगा |

- विषय वस्तु
- भाषा एवं प्रस्तुति
- शोध एवं मौलिकता

विशेष--परियोजना कार्य आकर्षक और सृजनात्मक होना चाहिए |

SCIENCE <u>Physics</u>

Design a working model based on any phenomena of physics or based on any laws of physics. And then prepare a project file (of at least 15 pages)describing the model and your efforts .

- 1. Newton's laws of motion
- 2. Law of conservation of linear momentum
- 3. Collision
- 4. Law of conservation of angular momentum
- 5. Law of conservation of linear momentum
- 6. Surface tension
- 7. Sound energy
- 8. Any electrical device

- 9. Pascal's law
- 10. Electric motor
- 11. Electric generator
- 12. Electromagnetic induction
- 13. Polaroid sheet activities
- 14. Total internal reflection
- 15. Refraction
- 16. Optical instrument
- 17. Drones
- 18. Robotics
- 19. Alarms
- 20. Density experiments
- 21. Interference or diffraction experiments
- 22. Hydraulics
- 23. Household circuits
- 24. Charge experiments

These are just examples. You all are free to decide your model. And then based on this model you need to prepare a file.

Things to be included in file

- 1. Front page
- 2. Certificate
- 3. acknowledgement
- 4. Index
- 5. Aim
- 6. Principle
- 7. Theory
- 8. Procedure
- 9. diagram/image
- 10. outcome/result
- 11. Conclusion
- 12. bibliography

It has to be completed by 30th of june.

Also compulsorily watch the following videos

Electricity | 10th Physics | Hindi | Khan Academy - YouTube

Electricity | Class 10 CBSE | Khan Academy - YouTube

Intro to voltage (& potential difference) (Hindi) | Electricity | Class 10 Physics | Khan Academy - YouTube

Introduction to circuits and Ohm's law (Hindi) - YouTube

Domestic circuit connection & fuse - Domestic circuit (Part 2) | Physics | Khan Academy - YouTube

Live wire, neutral & ground (earth wire) - Domestic circuits (part 1) | Physics | Khan Academy - YouTube

And then based on above videos, write short note of at least 1 page of each topic in your own language on following topics

- 1. Charge
- 2. Electric potential and potential difference
- 3. Electric current
- 4. Ohm's law
- 5. Resistance
- 6. Resistivity
- 7. Factors affecting resistance
- 8. Electric power
- 9. Electric energy
- 10. Joule's law
- 11. Household circuit

Last date 5th june 2021.to be uploaded on g-suit.

Chemistry

(Submission date - 28/05/2021)

Assignment 1. Crossword

Topic : The Chemical Reactions and Equations

		2								
1			3			6				
								7		
							11			

									8							L
						5									10	L
																L
										9						
											12					
		4														L
																L
Direction: Across : 1. A Energy B + C +D , The type of reaction is																
	 4. The reaction in which oxidation and reduction reaction takes place simultaneously is called 5. Coin of hydrogen is 															
		 5. Gain of hydrogen is 9. Slow eating up of metals due to attack of atmospheric gases is called 														
		11. When silver chloride is exposed to sunlight it turns due to formation of silver.12. The colour of nitrogen dioxide gas is														
	D	Down : 2. Name the type of reaction : $A + B + C$ D														

3. When aq solution of lead nitrate reacts with aq solution of potassium iodide an insoluble yellow substance lead iodide and aq potassium nitrate is formed, the type of reaction is ______ reaction.

6. Loss of hydrogen is considered as ______.

7. The colour of Basic copper carbonate (CuCO₃.Cu(OH)₂) is _____.

8. Corrosion in Iron is _____.

10. The food becomes ______ when oil or fat of food item gets oxidized in presence of atmospheric oxygen.

Assignment 2. Links for Chemistry Practicals (O - Lab Links)

After watching these videos - Learn and understand and complete your written work in Practical File.

<u>https://www.youtube.com/watch?v=dWy4RkMktj8</u> – displacement reactions and reactivity series

<u>https://www.youtube.com/watch?v=egku6aC3THI</u> – combination reactions

https://www.youtube.com/watch?v=tvYntqtQxmM - displacement Reaction

<u>https://www.youtube.com/watch?v=kgMARnXlmBY</u> – double displacement reaction

https://www.youtube.com/watch?v=__vax7D6IYQ - decomposition reaction

https://www.youtube.com/watch?v=hEnqBPoL_4E Determination of pH of various solution

https://www.youtube.com/watch?v=FCNYhFyhk3U Study of properties of Acids and Bases

Assignment 3. Activity based assignment (Will include in internal assessment)

Aim: Using Turmeric as an indicator to identify the Basic substances / solution from the following (i) Lemon Juice (ii) Baking Soda (iii) Vinegar (iv) Soap solution (v) Sugar Solution Prepare a PPT Presentation for a given aim.

Things to be included in the PPT

- 1. AIM
- 2. Material required
- 3. Theory (Definition of indicator / types etc.)
- 4. Pictures of activity
- 5. Observation table
- 6. Result

Assignment 4. Work Sheet

Topic : The Chemical Reactions and Equations

1. Define a balanced chemical equation. Why should an equation be balanced?

2. Write balanced chemical equation reactions taking place when carried out with the help of

- (a) Iron reacts with steam
- (b) Magnesium reacts with dil HCl
- (c) Copper is heated in air.

3. Write the chemical equation of the reaction in which the following changes have taken place with an example of each:

- (i) Change in colour
- (ii) Change in temperature
- (iii) Formation of precipitate

4. Why is photosynthesis considered as an endothermic reaction?

5. What is observed when a solution of potassium iodide solution is added to a solution of lead nitrate? Name the type of reaction. Write a balanced chemical equation to represent the above chemical reaction.

6. Describe an activity to observe what happens when quick lime is added to water taken in a beaker. State two important observations and name the type of reaction taking place.

- 7. What is meant by
- (i) precipitation reaction,
- (ii) exothermic reaction,
- (iii) Redox reaction?

Write balanced chemical equations for an example of each.

8. You might have noted that when copper powder is heated in a china dish, the surface of copper powder becomes coated with a black colour substance.

(i) How has this black coloured substance formed?

(ii) What is that black substance?

(iii) Write the chemical equation of the reaction that takes place.

9. Which gas is filled in the chips packets to prevent rancidity and why?

10. What is corrosion? Explain its advantages and disadvantages.

11. Name two salts that are used in black and white photography.

12. Give reason for these change :

(i) A silver article turns black when kept in the open for a few days.

(ii) A copper article turns green when exposed to air.

13. Write any two observations in an activity which may suggest that a chemical reaction has taken place. Give an example in support of your answer.

14. Name the products formed on strongly heating ferrous sulphate crystals. What type of chemical reaction occurs in this change?

15. In the reaction $MnO_2 + 4HCl Mn Cl_2 + Cl_2 + 2H_2O$ Which species is oxidized and which substance is reduced?

16. Define an oxidizing agent.

17. In the reactions given below, identify the species undergoing oxidation and reduction. $H_2S(g) + Cl_2(g) 2HCl(g) + S(S)$

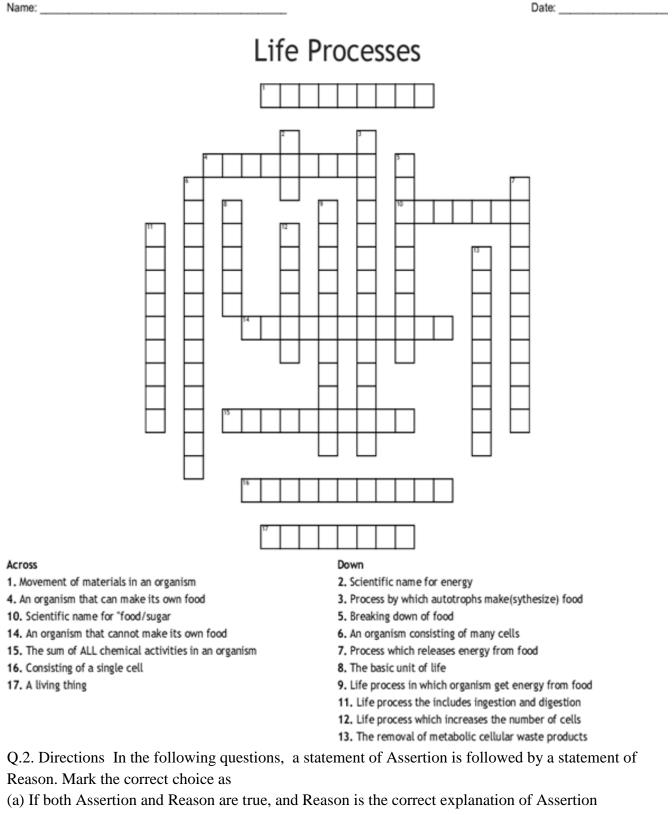
18. Define oxidation reaction and reduction reaction?

19. Why are decomposition reactions called the opposite of combination reactions? Write equations for these reactions.

20. Translate the following statement into chemical equation and then balance it Barium chloride reacts with aluminum sulphate to give aluminum chloride and a precipitate of barium sulphate. State the two types in which this reaction can be classified.

Biology

Q.1. Complete the following puzzle based on the important terms related to Life Processes.



- (b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion
- (c) If Assertion is true, but Reason is false

- (d) If Reason is true, but Assertion is false
- (e) If both Assertion and Reason are false
- Q. Assertion: Lungs always contain a residual volume of air.

Reason: It is so to ensure enough time for the release of CO2 and for the absorption of O2.

Q. Assertion: In a healthy adult, the initial filtrate in the kidneys is about 180 L daily, but the actual volume excreted is only a litre a day.

Reason: Most of the filtrate is lost from the body in the form of sweat.

Q. Assertion: Respiration is opposite of Photosynthesis

Reason: In Photosynthesis food is made from energy and in Respiration food is converted to energy.

- Q. Assertion: The four chambered heart does not mix oxygenated and deoxygenated blood. Reason: Four chambered heart is found in mammals with advanced body functions.
- Q. Assertion: Translocation of food occurs in Plants.

Reason: Xylem tissue is responsible for Translocation.

- Q3. Name the structure marked as 'X' in the given figure and also mention the functions of this structure.
- Q4. Which raw material is responsible for the release of O2 in photosynthesis?
- Q5. (i) How does food prepared by leaves is utilised by roots? Explain.
 - (ii) Water is absorbed by roots and lost through leaves. How does this happen?
- Q.6. Give reasons for the following:
- (i) The muscular walls of ventricles are thicker than the walls of atria.
- (ii) Arteries have thick elastic walls.
- (iii) Oxygenated and deoxygenated bloods are separate in the heart of mammals.
- (iv) Ventricles are thick-walled.
- (v) Herbivores have longer small intestine as compared to carnivores.

Q.7. Write the following experiments in the lab manual/practical record.

- Expt 1: Preparing a temporary mount of a leaf peel to show stomata.
- Expt 1: Experimentally show that carbon dioxide is given out during respiration.

Q.8. Watch the following links for better and clear understanding.

https://www.youtube.com/watch?v=mZvzl8KH6iI

//www.youtube.com/watch?v=zd_e9gtDExM

https://www.youtube.com/watch?v=ajfZUIpGG64

https://www.youtube.com/watch?v=EU2skU3bgS8

https://www.youtube.com/watch?v=J0hjnC14uMM

SOCIAL SCIENCE

1. Every student has to compulsory undertake one assignment on the following topics

Consumer Awareness OR Social Issues

OR

Sustainable Development

 Objectives - The over all objective of the project work is to help students gain an insight and pragmatic understanding of the theme and see all the social science disciplines from interdisciplinary perspective. It should also help in enhancing the life skills of the students. Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare project report.

3.

S. number	Aspects	Marks
А.	Content accuracy, originality and analysis	2
Β.	Presentation and Creativity	2
C.	Viva Voce	1

4. The project carried out by the students in different topics should subsequently be shared song themselves through interactive sessions such as exhibitions ,panel discussions etc.

5. Students may choose one of the topic given above

Suggested presentation

I Consumer Awareness:

i) Hand book/PPT / Film making / Slogan writing /cartoon /caricature e.t.c. giving information about government initiative and NGO contribution.(You can do a telephonic survey or can exchange the mails)
ii) Creat an innovative advertisement on any aspect of consumer awareness.

Can take help of given link

https://diksha.gov.in/play/collection/do_3132247020780666881587?referrer=utm_source%3Dmobile%26 utm_campaign%3Dshare_content

II Social Issues:

i) Create a calender/ timeline highlighting legislations on various issues.

ii) comic strips creating awareness on social issues.

III Sustainable Development:

i) Conduct a survey among your family and neighbours on the impact of the Pandemic.

ii) PPT on innovative ideas to highlight importance of Sustainable development.

iii) Impact of the Pandemic on nature and ecology.

You can take help with given link

https://youtu.be/B8Ig0Ig3h8U

Dear students please find the given link it will help you to understand history Chapter-2 Nationalism in India

https://diksha.gov.in/play/collection/do_31312343460681318411260?referrer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content&contentId=do_313066717853474816114045 Date of Submission 15 june 2021

MATH

Dear Students

Click here to explore summer break Math Fun work Activities

IT 402

- 1. Create mind maps for Chapter Communication Technology and Self Management
- 2. Design a pamphlet/flyer on Cyber Awareness or Green Technology. Apply different styles on it
- 3. Make a PPT on any one topic Green Technology / Mail Merge, advantages and its steps / Table of Contents and Creation Steps./ Styles and formatting

Reference for PPT :

Styles and formatting Table of Contents and Creation Steps Mail Merge, advantages and its steps https://youtu.be/6Gp-i2AKikQ https://youtu.be/oIRi3D1O0Lw https://youtu.be/s08ym1QWuoc

Rubrics - Content and relevance, Creativity, Innovation, Submission on Time.
