



# HOLY HEARTS EDUCATIONAL ACADEMY

RAIPUR, CHHATTISGARH, 0771-421700, 2431088

**CLASS : X**

## **SUMMER HOMEWORK - 2021**

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### **English**

1. Complete the work done during the month of April and May in your class work copy.
2. Cover your books and copies neatly. Label the copies. Don't forget to maintain the index page. You have internal marks for your copy.
3. Make a Portfolio (like you did last year). Write a proper introduction page of yourself as a first page, wherein you will mention your name, your parents name, dob, class in which you are studying, your height and weight, hobbies, your strengths, your weaknesses, your goals of life. Stick a passport size photo of yours.
4. Read a novel of your choice. Write a short write up on it, mentioning the name of the novel, Author, what the novel is about and what you liked about it.
5. Stick paper cutting of any 5 positive news from English newspapers in your Home Work copy. The activity should be done thrice a week in your entire vacation period.
6. Lencho suffered first due to drought and then by flood. Our country is also facing such situations in recent years. There is a need to save water through water harvesting. Design a poster on how to save water during summer and when it is available in excess.
7. Write the following letters as a practice:
  - a). Letter to Editor: You are Radha G, a member of NGO AWAAZ. Write a letter to the editor of a national daily for a public movement to clean the Yamuna River. (You must introduce yourself, describe how the people are to be blamed for polluting the river and suggest the need for installing a water treatment plant to clean the river).
  - b). Letter of Complaint: Write a letter to the in-charge of the text-books section of NCERT, New Delhi complaining about the non-availability of textbooks even one month after the beginning of the new session. You are Rohit Rana reading in St. Xavier's School, Delhi.
  - c). Letter of Enquiry: You are Rahul/Renu of 97, Prashant Vihar, Saharanpur, Uttar Pradesh, studying at a coaching centre in Model Town, Delhi. You need accommodation for yourself. Write a letter to the Manager of Paying Guest Services, 108, students Complex, Model Town, Delhi, inquiring about the details such as the type of accommodation, monthly charges and other detail.
  - d). Letter of Placing Order: You are Nalini/Vishal, Hostel Warden, Zenith Public School, Kosikalan, Uttar Pradesh. Write a letter to the Sales Manager, Bharat Electronics and Domestic Appliances Ltd., New Delhi, placing an order for a few fans, microwaves, ovens and geysers that you wish to purchase for the hostel. Also ask for a discount permissible on the purchase.
8. Video Making: Make a video speaking on any one of the following topics;

Childhood memory you cherish

A Funny Incident you faced

A family holiday you enjoyed the most

Historical character you admire most.

Video should not exceed 3 minutes. It has to be sent through WhatsApp to your teacher in charge.

### **ART INTEGRATED ACTIVITY**

AIA is an activity that you can perform in a group of 4-5 students.

The entire activity should be related to the state of CHATTISGARH

Following are the topics on which you can perform this activity. (You are supposed to perform on any one of the given activities)

1. Travel Brochure (hard copy)
2. Folk Dance (video)
3. PPT on Religious Places/Festivals and celebrations of Chhattisgarh
4. Fashion Show on traditional dress of Chhattisgarh and it's different textiles (video)
5. Project on
  - a). Famous poets and Authors from Chhattisgarh
  - b). Music and Dance
  - c). Panting, Pottery, sculpture (hard copy)
6. Recitation of Chhattisgarhi poem explained in Hindi and English (video)
7. Traditional food of Chhattisgarh (video)

**It is compulsory for all the students to participate in this activity as it comes under internal assessment of Subject Enrichment for 5 marks.**

\* Most Important thing is that the activity of Folk- Dance needs students to get together at one place. Do not pressurize your parents to send you to your friend's place. If your parents do not give permission, please choose some other activity as there are plenty of things that you can do.

**Keep the AIA ready for submission immediately after the reopening of the online classes.**

### HINDI

1- पोर्ट फोलियो फाइल बनाइए-

अ)- अनुच्छेद लिखिए 80 से 100 शब्दों में -' सांसे हो रहीं कम, आओ पेड़ लगाएं हम।

ब) रचना के आधार पर वाक्य भेद बताते हुए उनके पांच -पांच उदाहरण लिखिए।

स) 'मदर्स डे' पर अपनी मां के लिए 30 से 40 शब्दों में एक संदेश लिखिए।

2- वीडियो बनाइए-

1. वर्तमान परिस्थिति में मानसिक शांति को बनाए रखने के लिए योग और अध्यात्म कितने सहायक हैं ?माता-पिता से चर्चा करते हुए वीडियो बनाइए।

अथवा

2. बढ़ती गर्मी को देखते हुए पक्षियों और गली में घूमने वाले पशुओं के लिए चारे व पानी की व्यवस्था करते हुए अपना वीडियो बनाइए।

3. आर्ट इंटीग्रेटेड एक्टिविटी कीजिए-

खेल, राजनीति, संगीत, कला व मनोरंजन, सामाजिक कार्यो आदि क्षेत्रों में अपने राज्य छत्तीसगढ़ की उन महिलाओं के बारे में लिखिए, जिन्होंने राज्य व देश का गौरव बढ़ाया है।( किसी भी क्षेत्र की एक महिला के बारे में जानकारी एक विद्यार्थी को लिखना है और उनसे संबंधित चित्र भी लगाना है।)

### SANSKRIT

पोर्टफोलियो

संस्कृत संगणकाय उपयुक्तम् भाषा अस्ति ।

अनुच्छेद लेखनम् ।

2 भगवत् गीता 5श्लोकः भावार्थ सहितम् ।

### VIDEO

वंदे मातरम गीत/शिव स्तुति सस्वर गायन ।

2नाट्य/कथा अभिनय म्

यथा। बुद्धि बलवती सदा, शिशुलालनम् ।

परियोजना कार्यम्

1विद्यया, पर्यावरण म्, सत्यं, सदाचारः, मैत्री, आदिनाम् विषयक श्लोकानाम् संग्रह भावार्थ सहितं

## **MATHEMATICS**

1. Solve the Exercises of Chapter - 1 from reference book R.S. Agrawal
2. Mathematics Portfolio about Euclid's Contribution to Mathematics (4-5 pages)

Make a video on any one of following topics from Mathematics:

1. Introduction of Real Numbers (Define Number System)
2. How can you use Trigonometry in your daily life?
3. How can you use Mensuration/Statistics in your daily life?

You can make video individually or with your classmates also. Duration of video should be 2-3 minutes.

### **Art Integration Activity:**

Make a bar graph on no. of people vaccinated till today in main districts of Chhattisgarh. ( Take at least 5-6 districts )

## **SCIENCE**

### **PHYSICS**

#### **1. Subjective Assignment**

- (i). Explain about ohm's law. (Statement, circuit diagram, formula, graph) .
- (ii). Draw different combinations of resistors.
- (iii). Write all the formulae of electricity chapter.
- (iv). Draw the symbols for different components used in circuit diagram.
- (v). Write the answers for in text and exercise questions.
- (vi). Calculate the electricity bill of your house in the month of April by giving detailed information about appliances power and total hours it works.

#### **2. Video Assignment**

Students have to make a video of 2-3 minutes on any one topic.

Take any electrical appliances (like iron, A.C., refrigerator etc and see what specification is written at its back side about power, voltage etc.). Make a video explaining what the meaning of these specifications is.

With the help of blank paper and transparent glass of water show that the object made in blank paper flipped horizontally when kept behind the transparent glass of water. Explain in a video why it is happening.

With the help of a short video explain how lenses are used to correct the defects of the human vision system.

#### **3. PORTFOLIO**

Students have to make their portfolio in stick file. (Any one topic)

- i). Resistivity of alloy and metal.
- ii). Laws of Refraction.
- iii). Working and principle of Electric generator.

#### **4. Art Integration project**

Students have to make PowerPoint presentation (on any one topic) related to Chhattisgarh State. Coal Power plant in CG (Numbers, places and capacity).

Hydro based power plant in C.G. (Number. Places and Capacity).

## **CHEMISTRY**

Solve NCERT in text questions and end exercise questions of chapter 1, Chemical Reactions and Equations in your chemistry copy.

### **VIDEO ASSIGNMENT:**

Students have to make a video of 2-3 minutes on any one topic.

1. Make and learn a song to memorize periodic table.
2. Explain sonorous properties of different metals.
3. Explain corrosion and its prevention method.

### **PORTFOLIO:**

Students have to make their portfolio in stick file.(any one topic)

1. Different types of Chemical reactions with one example each.
2. Mystery of Chemistry i.e., Allotrope of Carbon ( properties of diamond and graphite)
3. Classification of Matter.

### **ART INTEGRATED PROJECT:**

Students have to make PowerPoint presentation (on any one topic) related to Chhattisgarh State.

1. Effect of pollution on climate change
2. Most abundant mineral in C.G and its uses.
3. Life style of tribals and secrets behind their strong immune system.

## **BIOLOGY**

Q1 Why do herbivores have longer small intestines than Carnivores?

Q2 Write the balanced chemical equation for the process of photosynthesis. How photosynthesis occurs in desert plants.

Q3 Draw a neat labelled diagram of the human alimentary canal.

Q4 Explain the process of nutrition in amoeba.

Q5 How do guard cells regulate the opening and closing of stomata?

Make portfolio on topic-(choose any one topic)

- 1) Reforestation and Bioremediation(project should be focussed on environment day)
- 2) Write a short note on vaccination(based on current situation)
- 3) Write a short note on genetic variations(focus on how mutations has made new strain of Covid 19 so dreadful)

### **Video Assignment (on any one topic given below) (Art integration included)**

- 1) Explain how  $CO_2$  and chlorophyll is necessary for photosynthesis with one activity each.(Use potted plants at your garden, use them to demonstrate)
- 2) Explain human respiratory system in detail.(Prepare clay model to demonstrate)
- 3) Show the monitoring and usage of any medical equipment present at home like-oximeter, thermometer, electronic blood pressure monitoring device etc and mention their roles and functions in present situation.

## **SOCIAL SCIENCES**

1. Make a portfolio file to include the following topics  
(A).The Internet has changed the way the world works at present.  
(B).Covid-19 has its positive impacts too; justify this statement giving your personal experience.  
(C).Father's day is a perfect day to express your gratitude towards your father. Share some of your heart-warming moments with your father in the portfolio.
2. Prepare a project on "Sustainable Development"
3. **Art integration Activity**

Make a PowerPoint presentation; focusing on our own state; Chhattisgarh's; Cuisine, Dress, Folk dance, Folk songs, Tradition, Festivals, Famous tourist places.

**4 Video making skill ( on any one topic)**

1. Make a video to justify "An intelligent sharing of power among legislature, executive and judiciary is very important to the design of a Democracy".
2. Make a video to show; why power sharing is desirable, focusing on the power sharing model of Belgium and Sri Lanka.
3. The Indian Nationalist Movement against colonial rule, is a perfect bouquet of many incidents. Make videos on the following events to arouse a sense of nationalism.
  - a. Salt Satyagraha
  - b. Jallianwala Bagh massacre
  - c. Swadeshi and boycott movement
4. Make a video in the public interest to spread the message that "We have not inherited the earth from our forefathers, instead; borrowed it from our children."

**INFORMATION TECHNOLOGY**

1. List any 3 ISP's available in your city. After collecting information such as connectivity type, speed and charges, compare them and state which is the best ISP and why?
2. Identify the type of network topology in your school lab.
3. Identify the devices that support instant messaging.
4. Create a blog on Digital education of yours using WordPress/ BlogSpot/wix or any other blog service provider.
5. Open various government and private sites for registration of tickets or purchase of any product and observe the information asked on such transaction sites.

**SPECIALLY DESIGNED TASK FOR ENHANCING READING, WRITING SKILLS, VOCABULARY AND GENERAL KNOWLEDGE**

- a) Watch the English movie 'The Lion King' and write the story of the movie in your own words.
- b) Write a diary entry on how you spend the day. List the things that make you realize how grateful you need to be for all that you have.
- c) **General Knowledge Questions:**
  1. Indian standard time is situated at \_ ° longitude?
  2. How many biosphere reserves are there in India?
  3. How many Indian wrestlers have won medals in Olympic Games?
  4. What was the name of the Mars rover sent by NASA that landed successfully in 2021?
  5. What do you call a person who uses the internet to explore and communicate?
  6. Who invented Compact Disc?
  7. Which day is celebrated as World Computer Literacy Day?
  8. World's first microprocessor is.....
  9. Which IT Company's nickname is ' The Big Blue'?
  10. Which country has the most islands in the world?
  11. Name the largest not the highest mountain range in the world.
  12. Name the bestselling book series of the 21st century.
  13. Who is third, on the all-time list of female tennis grand slam champions?
  14. Who was the first man to climb Mount Everest without oxygen?
  15. Who performed the world's first heart transplant?
  16. Which city is the statue of liberty in?
  17. Which animal never drinks water in its entire life?
  18. Which is the largest human cell.
  19. What is the normal value of blood sugar in the body?
  20. Jaspal Singh Rana is a distinguished athlete of which game?
  21. Portuguese were the first European to come to India. When did they leave India?

22. Under which theme India in 2018 hosted the celebration of World Environment day?
23. How many schedules were there in the original constitution of India?
24. Which year did India first take part in the Olympic Games?
25. Which state has only one member of the Lok Sabha ?
26. Which Indian state had the first woman Chief Minister?
27. Who appoints the Governor of Jammu & Kashmir?
28. Who has the right to transfer any case anywhere in India?
29. The Contingency Fund of the State is operated by-
30. Which IT company's nickname is ' The Big Blue'?
31. Who is known as the Father of Mathematics?
32. Which movie is based on Srinivasa Ramanujan?
33. "Numbers rule the Universe" who said it ?
34. Who discovered zero?
35. When is Pi Day celebrated around the world?
36. The Ramon Magsaysay Award is given in memory of the former president of which country?
37. In which Charles Dickens' novel were the character Bentley Drummle, Joe Gargary and Herbert Pocket?
38. Besides Arundhati Roy and Kiran Desai, who is the other one to win the Man Booker Prize from India?
39. Who is the first winner of the Jnanpith Award?
40. What is the name of the first satellite sent into space?
41. Who is the current Vice President of India?
42. First Indian to win an individual gold medal at the Olympic Games?
43. Who is the CEO of electric car company "TESLA"?
44. What is the name of the first Indian satellite?
45. Tsunami is a word in which language?
46. RQP, ONM, \_ IHG, FED, find the missing letters.  
I. CDE      ii. LKI      iii. LKJ      iv. BAC
47. PETAL: FLOWER  
I. Pen: Paper      ii. Engine: Car      iii. Cat: Dog      iv. Ball: Game
48. Pointing to a photograph, a man said, "I have no brother, and that man's father is my father's son." Whose photograph was it?  
I. His son      ii. His own      iii. His father      iv. His nephew
49. I. Pooja is older than Mukesh.  
II. Suresh is older than Pooja.  
III. Mukesh is older than Suresh.

If the first two statements are true, the third statement is

- I. False      ii. True      iii. Uncertain
50. An animal always has  
I. Skin      ii. Heart      iii. Lungs      iv. life