BAL BHARATI PUBLIC SCHOOL, PITAMPURA, DELHI - 110034



#### SESSION - 2020-2021

#### CLASS XII HOLIDAY HOMEWORK (JUNE 2020)

The Holidays' Homework MUST be submitted by 10<sup>th</sup> July 2020.

### **ENGLISH**

Sikkim, the paradise of peaceful hills This lively sweet abode of angels great Harnessed forever in love Selflessly hast thou lived.

Prepare a video **of one minute** wherein **you are speaking** on a topic, as per your roll no., in relation to the state of **Sikkim**.

- Roll no 1-11: Odd roll no History, Even roll no Tourism
- Roll no 12-22: Odd- Religion, Even- Dance
- Roll no 23-33: Odd- Food, Even- Art and Craft
- Roll no 34- 44: Odd- Monuments, Even- Government
- Roll no 45- 55: Odd- Folk music, Even- Language
- Roll no 56- 66: Odd- Famous persons, Even- Festivals

#### Kindly Note:

- No reading from paper is allowed.
- Criteria of language, fluency and pronunciation to be kept in mind.
- Send your video through your official mail id to the mail id assigned against your section.
- Mention your topic in the Subject of the mail.

XII-A & D- rashika.singh@pp.balbharati.org

- XII-B & E- kananshree.sharma@pp.balbharati.org
- XII-C & F- pamela.sandhu@pp.balbharati.org

XII-G & H- rashmi.ashtikar@pp.balbharati.org

Time required to complete the holidays' homework: 4 hours

### MATHEMATICS

1

You must have come across many spectacular buildings, but have you ever stopped to wonder why they're built that way?

Math and architecture are more closely linked than you might think. So, this summer as a part of the EBSB programme, you have to explore the structure/layout/design of monuments/house/huts built in Sikkim and try to find out the reasons behind the way they are built.



#### Mathematical Points to explore

- How are architectural monuments built using golden ratio even today?
- How are some of them great examples of line symmetry?
- How cylindrical shape minimizes whirlwinds that can form the base of large buildings?
- How does climate play a role in the design of a building?
- Why are certain buildings hemispherical from the top? etc. etc.

Task: Explore the structure of various monasteries/monuments/houses in Sikkim and choose 1 of your choice. Trace the structure of the building on a coloured/plain A4 size sheet and identify the various 3-D shapes involved in it and the reasons why those shapes are preferred over other shapes. What kind of architecture do we find in the construction of the building and why? Yes, you have to write that too on the sheet. After tracing and identifying the 3D shapes involved, decorate any two 3D shapes by any art form like Mandala art, Warli art etc.

Please maintain a file for the same. Remember to click photos of yours while doing the activity and of the final sheet too. (to be uploaded on the CBSE site)

Note: As a pedagogical initiative, CBSE has introduced Art- Integrated Learning in all its affiliated schools under "**Ek Bharat Shrestha Bharat Programme (EBSB)**". These activities have been designed keeping that in view.

Also, don't lose track in holidays....do try minimum 2 questions everyday... Time required to complete the holidays' homework: 6 hours

### **PHYSICS**

Study of physics involves the use of lot of symbols. Your assignment is to draw a sketch of a landscape or a monument or a person or anything you like and incorporate symbols used in physics including electrical symbols into your sketch.

Some of the symbols are given at

- https://www.electronicshub.org/symbols/
- https://physicsworld.com/a/web-life-sixty-symbols/

You can use any other physics symbols too beside these ones. Please note that this project is a part of Art Integrated Learning (AIL) introduced by CBSE this year for class 12 students. Time required to complete the holidays' homework: 1.5 hours

### **CHEMISTRY**

# Have you ever wondered why Chemistry is so important? What is the role of Chemistry in our lives?

We all are made of chemicals and everything around us is also made of chemicals. Hearing, seeing, tasting, and touching, all involve intricate series of chemical reactions and interactions in our body.

Chemistry is not limited to beakers and laboratories; it is all around us. Chemistry is present in every aspect of our life.

#### Chemistry of Emotions

### Chemistry in Hygiene

### **Chemistry Of Drugs**







Chemistry in Food Preservatives



### **HYDROXYCHLOROQUINE**

Why was this drug in news?

What has this drug been used for?

The severe acute respiratory syndrome Coronavirus, also called COVID-19, has caused a pandemic which has swiftly engulfed the entire world and has raised great public health concerns. Studies have suggested that Chloroquine and Hydroxychloroquine can successfully treat COVID-19 infections. Hence, the scientific community is actively exploring treatments using Hydroxychloroquine, that would potentially be effective in combating COVID-19.

Study at least two examples of Chemistry from different aspects of daily life and design a poster or create a short interesting write-up or an article along with supportive images.

### (KINDLY POST IT ON THE PADLET WALL.)

You can post your files on the common page below. (ATTENTION- file size should be less than 10 MB. Do mention your name and class in each document.)

https://padlet.com/anitasood/Bookmarks

### FOR CLASSES 12-A AND B

https://padlet.com/surbhikumar/t1hqhe7ajgh4u550 FOR CLASS 12-C

Time required to complete holidays' homework- 1 hour

### **BIOLOGY**

The significance of studying biology is to help us understand our cultural capacity and our adaptation to different environments. To understand the culture of Sikkim, students will focus on bird diversity in that land.

Students will follow the steps given:

- 1. Prepare a list of 5 endangered bird species of Assam.
- 2. Every sheet will have one logo drawn by the student, which would exhibit the bird and a brief information about its significance in the culture of Sikkim.
- 3. Express your opinion on why people worship birds and therefore protect them.

Time required to complete the holidays' homework: 3 hours

### COMPUTER SCIENCE & INFORMATICS PRACTICES

Pixel puzzles change the way images are represented as a series of numbers, making pixels into puzzles. They come in various forms from a simple variant of colour-by-numbers to more complex puzzles based on compression wherein images are represented by fewer numbers. So, they take up less storage - but can you get them back? Well, each representation needs its own algorithm to be followed to get the image back.

Each image is split into a grid of squares. Each number gives the colour of that square of the image. Each square is called a pixel. The more pixels making up the image, the higher the resolution it has.

Each square holds a number that tells you the colour to colour in that square. Look up the colours in the key. Sample grid is given below for reference.

Students are to select an image related to any Indian art form and prepare a grid with a colour key, in MS- Excel.

You can also refer to the following website: https://abitofcs4fn.org/puzzles/colour-by-number-puzzles/

Some sample images have been given below for your ready reference:





Time required to complete holidays' homework- 2 hours

### ACCOUNTANCY

Students will prepare a Project File on <u>COMPREHENSIVE PROJECT</u> in the following format:

1. First page of the file should describe the title of the work, identity of the student, name of the school, and the teacher concerned.

2. Index to indicate columns for the title of the work, page no., date, teacher's remarks and signature, Certificate and Acknowledgement.

- 3. The format for Project Work will be:
  - Statement of the problem/Name of the Project
  - Objectives
  - Period of Study
  - Source Material Project statement
  - Tools of Analysis used- Ratios
  - Processing and Tabulation of data- Journal, Ledger, Trial balance, Trading and Profit & Loss Account, and Balance Sheet
  - Diagrammatic/Graphic presentation- pie-diagram for assets and liabilities

#### Note:

- The Project File should be neatly handwritten by the student only.
- As per guidelines given by CBSE for ART INTEGRATED LEARNING (AIL), the diagrammatic/ graphic presentation in the project work has to be done in some peculiar Indian Art Forms like Mandala, Madhubani, Gond Art etc.

Time required to complete the holidays' homework: 8 hours

### **BUSINESS STUDIES**

Write all the headings of Marketing management projects in any Indian art form like Madhubani.

Time required to complete holidays' homework - 4 hours

### ECONOMICS

#### **INSTRUCTIONS FOR THE FILE WORK -**

- All students of class 12 are to prepare one project file.
- The file has to be covered with a dark blue cover. No over-decoration of the cover page of the file is required.
- The pages are to be arranged in the following sequence.
  - page1 --topic of the project + your name and class roll number
  - page 2--- index
  - page 3 -certificate
  - page 4 acknowledgement
  - page 5-- project content starts with introduction and objectives of the project
  - Students can add suitable case studies or questionnaires
  - As a part of CBSE- Art Integrated learning (AIL), students are to use various forms of art related activities in the project that may include pictures,

drawings, comic strips, mind mapping, some work using paintings like Madhubani, Gond art etc.

- Students can also paste related newspaper cuttings or any other form of statistical data that they might find in various forms of published sources available.
- The file has to be decorated in a subtle manner. Students should focus more on the concepts and the content given in the project work. The file has to be presentable.
- Total number of pages may range from 25 to 30.
- Last page conclusion followed by bibliography.

#### THE FILE WORK HAS TO BE NEATLY DONE WITH ALL THE CONTENT TO BE STRICTLY WRITTEN IN YOUR OWN HANDWRITING.

Scope of the project:

Student may work upon the following lines:

- Introduction
- Details of the topic
- Pros and Cons of the economic event/happening
- Major criticism related to the topic (if any)
- Students' own views/perception/ opinion and learning from the work
- Any other valid idea as per the perceived notion of the student who is actually working and presenting the Project-Work.

#### SUGGESTIVE LIST OF TOPICS FOR PROJECT WORK.

- 1. Micro and small scale industries
- 2. Food supply channel in India
- 3. Contemporary employment situation in India
- 4. Disinvestment policy
- 5. Health expenditure (of any state)
- 6. Goods and Services Tax Act
- 7. Inclusive growth strategy
- 8. Human Development Index
- 9. Self-help groups
- 10. Recession
- 11. Global recession 2008
- 12. Recession 1929 (the great depression)
- 13. Agricultural policies since British rule in India
- 14. Industrial policies since British rule
- 15. Structure of foreign trade policies in India since British rule
- 16. Economic structures of China and India and a comparison
- 17. Banking system in India
- 18. Government budget
- 19. Role of Planning Commission and shifting to Niti Aayog (reasons)
- 20. USA China Trade war
- 21. You can also club chapters of macroeconomics and Indian economics like:
  - a. LPG and balance of payment
  - b. Role of banking system, poverty, employment and infrastructure
  - c. Taxation policies of India and their role in reducing inequalities etc.

Time required to complete the holidays' homework: 6 hours

### **GEOGRAPHY**

### EK BHARAT SHRESHTHA BHARAT

Sikkim was ruled by a Buddhist priest-king known as the Chogyal. It became a princely state of British India in 1890. After 1947, Sikkim continued its protectorate status with the Republic of India. On 16 May, 1975, Sikkim became the 22nd state of the Indian Union, and the monarchy was abolished. To enable incorporation of the new state, the Indian Parliament amended the Indian Constitution.

Delhi is a city and a union territory of India containing New Delhi, the capital of India. It is bordered by the state of Haryana on three sides and by Uttar Pradesh to the east. The NCT covers an area of 1,484 square kilometres. According to the 2011 census, Delhi's city proper population is over 11 million, the second-highest in India after Mumbai.

Design an E-brochure of four pages on Sikkim and Delhi and show the following:

- 1. Locate Delhi and Sikkim on the map of India.
- 2. Compare and contrast Delhi and Sikkim on the basis of their locational setting, physical features, climate and population size.
- 3. Write a short note on Delhi ridge, Yamuna, Kanchenjunga and Teesta river. You can also attach their photographs.
- 4. Draw a poster showing a lady from indigenous Magar Community of Sikkim in her traditional attire and jewellery and make it a part of your brochure. Time required to complete the holidays' homework: 6 hours

### <u>HISTORY</u>

#### GANDHARA SCHOOL OF ART

The Gandhara School of art developed in the first century AD during the reign of Kushana emperor, Kanishka. The Kushanas were patrons of Gandhara School, which is known for the first sculptural representations of Buddha in human form.

Design an E-Collage with representation of statues of Lord Buddha in various poses. The typical features of the School of Art are as follows:

A very realistic and natural depiction of features in perfection, dominated by the themes of Lord Buddha. The Greco-Roman effect on Gandhara art can be traced through:

- Halo around the head of Lord Buddha
- Buddha's wavy hair
- The forehead lines
- Ornaments
- Drape and style of the garments

Note: Students to work in a group of 4-5, as already formed for the CBSE history **project** Time required to complete the holidays' homework: 8 hours

### PAINTING

#### Topic - Make a Project on Art and Craft of Sikkim

- Make a Thangka Painting from the state of Sikkim, using poster colours on an art file or A3 Cartridge Sheet.
- Three Still life studies with oil pastel or watercolor.
- Prepare a Wall hanging/Doll/Jewellery/Bookmarks from the State of Sikkim. Use any colour or material can be used as per availability in your home for it.
- Do 10 sketches in newsprint sketchbook / newspaper daily.
- Make a handmade project file with the art motifs of Sikkim and write a brief account about the Art and Craft forms of Sikkim.
- You can take reference from the Internet.

Time required to complete the holidays' homework: 12 hours

### **POLITICAL SCIENCE**

You have to study about Sikkim and prepare a presentation, showcasing Sikkim's annexation with India, its art and cultural heritage. Also, focus on how Sikkim contributes to India's economy, its natural resources, produce and others. Students are to prepare a small video of 1 minute after viewing the content available through the link given below.

Video Link for reference: <u>https://youtu.be/sQTakMWGwis</u> Time required to complete the holidays' homework: 4 hours

# **PSYCHOLOGY**

It's becoming increasingly common for Bollywood to highlight the importance of mental health in films. Since mental illness affects so many, it's an extremely relatable theme. Owing to the nature of drama, extreme and florid manifestations of a given disorder tend to prevail over the more subtle manifestations typical of an average case. Watch the following movies:

- 1. Kartik calling Kartik
- 2. Bhool Bhulaiyaa

In each of the movies -

- a) Identify the disorder being depicted.
- b) Enlist the symptoms of the disorder and pick specific instances from the movie where those symptoms are being portrayed.
- c) Highlight the discrepancies between reality and the movie portrayal of it, if any.

Read an article through the link given below and answer the following questions: <u>https://m.dailyhunt.in/news/india/english/sikkim+chronicle+eng-epaper-sikch/the+neglected+mental+health+crisis-newsid-139667684</u>

Q.1 What are the major psychological issues or concerns faced by the people of Sikkim? Q.2 Identify the causal factors leading to the emergence of psychological issues. Q.3 Discuss how these issues are being dealt with at present. Also suggest some ways that you feel may be helpful in tackling the situation.

# Do the work in A4 size sheets.

# Refer to the Internet and the Psychology textbook - Chp. 4 and 5 for more information on psychological disorders and therapies.

# Click photos while performing these activities for CBSE records.

Time required to complete the holidays' homework: 12 hours

## **PHYSICAL EDUCATION**

Students are to make a record file that would include the following:

S.no.	Game	Detail
1	Athletics	History of Athletics List down all the events of Athletics. Latest changes in rules Explain any two races, any two jumps and any two throws. Sports personalities of Athletics List of National Awardees in Athletics Important tournaments Labelled diagram of 400m track with computations (Use Rajasthani paintings to depict it.)
2	Yoga	History of Yoga List down all the asanas of Yoga. Procedure for Asanas, benefits and contradictions between any two asanas for each lifestyle disease
3	Game of your choice: Basketball, Cricket, Football or Volleyball	History of the game Fundamental skills of the game Rules and regulations of the game Latest changes in rules Sports personalities of the game List of National Awardees of the game of your choice Important tournaments
4	Senior Citizen Fitness Test	Procedure for administering Senior Citizen Fitness Test for 5 elderly family members
5	Fitness Tests	Fitness tests' administration for all items

Time required to complete the holidays' homework: 6 hours