

[illegible]

## हिंदी –

- 1 - नारा-लेखन पर आधारित 'Critical Thinking' कार्यपत्रिका पूर्ण कीजिए। (10 अंक)
- 2- सभी छात्र हिंदी का ई-पोर्टफोलियो पूर्ण कीजिए जिसमें हिंदी की विभिन्न कार्यपत्रिकाएँ, ई प्रमाण-पत्र तथा विशेष-दिवस हेतु हिंदी में अपने विशेष योगदान का विवरण हो। (10 अंक)
- 3- पुस्तक-समीक्षा हेतु सुभद्रा कुमारी चौहान की प्रतिनिधि कहानियों में से अंतिम 5 कहानियों का पठन-पाठन करें। साथ ही इसके लिए संस्कृत के विभिन्न श्लोकों का भी अभ्यास करें। (20 अंक)

## Sanskrit

- 1- 'एक भारत श्रेष्ठ भारत गतिविधि' - अरुणाचल प्रदेश: / मेघालय: नाम कैसे पड़ा - उसके नाम की सार्थकता को प्रतिपादित करते हुए वहाँ के दर्शनीयस्थलों व संस्कृति का वर्णन करते हुए नौ - दस वाक्यों में अनुच्छेद संस्कृत में लिखें। संबन्धित चित्र भी बनाएँ।



- 2- प्रातः कालीन सभा में दिखाए गए किन्हीं छः संस्कृत श्लोकों का अर्थ सहित गायन करते हुए एक वीडियो बनाएँ तथा गूगल क्लासरूम पर अपलोड करें।
- 3- सभी छात्र संस्कृत का ई-पोर्टफोलियो पूर्ण करें जिसके अंतर्गत संस्कृत विषय की सभी कार्यपत्रिकाएँ, ई-प्रमाणपत्र (अंतर्विद्यालयीय, अंतर्सदनीय प्रमाण पत्र, अतिरिक्त प्रमाण पत्र, विशेष दिवस) तथा संस्कृत भाषा के प्रति अपने योगदान को दर्शाएँ।
- 4- **धातुरूप** - परस्मैपदी - अस्, कृ, गम्, नी (पाँचों लकार);  
आत्मनेपदी- सेव्, लभ् (लट्, लृट्)  
**शब्दरूप** - मुनि, साधु, अस्मद्, युष्मद्, तत् तीनों लिंग  
सभी कार्य अभ्यास उत्तर-पुस्तिका में लिखें व याद करें।

## शिक्षण अधिगम -

- संस्कृत लेखन कौशल का विकास व शब्द भंडार में वृद्धि।
- भाषा संबंधी व्याकरणिक ज्ञान।
- गायन कौशल का विकास।
- श्लोकों के माध्यम से भारतीय संस्कृति से अवगत होना।

## **French-**

### **Les devoirs des vacances d'hiver**



Préparez une brochure touristique d'une des villes de la France avec ses photos et ses descriptions.

## **Mathematics-**

1. Kabir is working on an Art Integrated Mathematics project. The theme is 'Life in Water'. He has decided to create a school of different colored fish, similar to this



He has chosen to create his fish as shown in the figure below. Each fish would be made of squares and triangles of paper.



There are two sizes of fish that he wants to create. According to the dimensions of materials he has, he has decided to have the area of each big fish as  $352 \text{ cm}^2$ .

**Question 1:** What should the side of each square be?

- a)  $18.66 \text{ cm}$
- b)  $8 \text{ cm}$
- c)  $64 \text{ cm}$
- d)  $32 \text{ cm}$

**Question 2:** If the side of the square used for the smaller fish is half the size used for the bigger fish, then the ratio of their areas is-

- a)  $1:2$
- b)  $2:1$
- c)  $1:4$
- d)  $4:1$

**Question 3:** What is the total area of the colored paper that Kabir needs in order to create his school of fish?

- a)  $4675 \text{ cm}^2$
- b)  $4576 \text{ cm}^2$
- c)  $7654 \text{ cm}^2$
- d)  $5674 \text{ cm}^2$

2. Write and learn all formulas of chapter –Surface, Area and Volume and Polynomials.

### Projects

1. Development of mathematics Apps. (Odd Roll No.)
2. To investigate on male female ratio over generation and interpret it by using bar graph. (Even Roll No.)

## Science-

### PHYSICS

**THE PHYSICS OF TOYS:** Only your imagination and ingenuity limit you in your application of the fundamental laws of physics to ordinary objects, even toys. The basic principles of Physics can often be demonstrated, as well as made fun, by using ordinary toys. By understanding how these toys work, the observers can better understand the world around them.

- Each student individually or in group (not more than 4) will prepare a toy to explain the various laws of physics.
- Students will also prepare a video showcasing their toy and explaining the principle behind the working of the toy.
- Last date for submission of video and toy is 08 Jan, 2022.
- Suggested website/Links:
  - [https://instagram.com/physicsfun?utm\\_medium=copy\\_link](https://instagram.com/physicsfun?utm_medium=copy_link)
  - <https://www.arvindguptatoys.com/films.html>

## CHEMISTRY

### **SUBJECT ENRICHMENT ACTIVITY: (PROJECT WORK)**

Enquiry Based Scientific Investigation and Recording –

Demonstrate at least five physical and chemical changes displaying at home and providing a proper explanation to the same. Present it in an artistic manner in form of a Slide presentation/PPT and also relate the changes to environment that are degrading the climate and soil.

Submission on padlet link

## BIOLOGY

- Prepare a model of Carbon cycle (Even roll numbers) and Nitrogen cycle (Odd roll numbers) using common household items like grains and pulses threads ,wool etc. to be assessed as subject enrichment activity.
- Solve Critical thinking worksheet from topic natural Resources.

### Critical Thinking worksheet

MM:10



- Assertion Reason questions

**DIRECTION:** In each of the following questions, a statement of Assertion is given followed by a corresponding statement of Reason just below it. Of the statements, mark the correct answer as:

- (a)** Both assertion and reason are true and reason is the correct explanation of assertion.
- (b)** Both assertion and reason are true but reason is not the correct explanation of assertion.
- (c)** Assertion is true but reason is false.
- (d)** Assertion is false but reason is true

- Q1. Assertion : Wind always flow from high pressure area to low pressure area.  
Reason: The difference in temperature results in difference in air pressure.
- Q2. Assertion: Water is considered as universal solvent.  
Reason: Water dissolves nutrients, gases and many other substances for transpiration.
- Q3. Assertion: Producers (plants), consumers (animals) and decomposers (bacteria, fungi) all are biotic component of an ecosystem.  
Reason: Biotic component of an ecosystem are the living part.
- Q4. Assertion : A change in temperature adversely affect aquatic organisms.  
Reason : They are used to a certain range of temperature in the water-body where they live.
- Q5. Assertion : Air pollution is the presence of substances in the atmosphere that are harmful to the health of humans and other living beings.  
Reason : The burning of fossil fuels like coal, natural gas, petroleum in automobiles, industries and thermal plants leads to increase in air pollution.

## Case Based Questions

(a) Ozone layer is found in stratosphere about 18-50 km above the atmosphere.

(b) Thinning of ozone layer over a restricted area is called ozone hole.

The excessive use of chemical substances like CFCs is the major cause for depletion of ozone layer. These chemicals reach the stratosphere and start reacting with ozone layer and results in thinning of ozone layer over a restricted area.

(c) The depletion of ozone layer may cause :

(i) Skin cancer

(ii) Damage to eyes

(iii) Damage to immune system

(iv) In plants also it may increase the harmful mutations. Acid rain is the rainwater which contains excessive amount of acids/.e., sulphuric acid and nitric acid.

- These acids are formed in the atmosphere by the reaction of oxides of sulphur and nitrogen with water.
- The Oxides of sulphur and nitrogen are produced by combustion of fossil fuels in industries, automobiles, thermal power plants and domestic appliances etc.
- The sulphur and nitrogen, present in fossil fuels form these oxides by reacting with oxygen of air by the process of combustion.

(b) The presence of smog in an area indicates the high percentage of smoke released in the air by combustion of fossil fuel in industries, thermal power plants or automobiles. It is an indicator of air pollution.

Q1. The atmosphere of the Earth is heated by radiations which are mainly

- (a) radiated by the Sun
- (b) re-radiated by land
- (c) re-radiated by water
- (d) re-radiated by land and water

Q2. What would happen, if all the oxygen present in the environment is converted to ozone?

- (a) We will be protected more
- (b) It will become poisonous and kill living forms
- (c) Ozone is not stable, hence it will be toxic
- (d) It will help harmful Sun radiations to reach Earth and damage many life forms.

Q3. The two forms of oxygen found in the atmosphere are

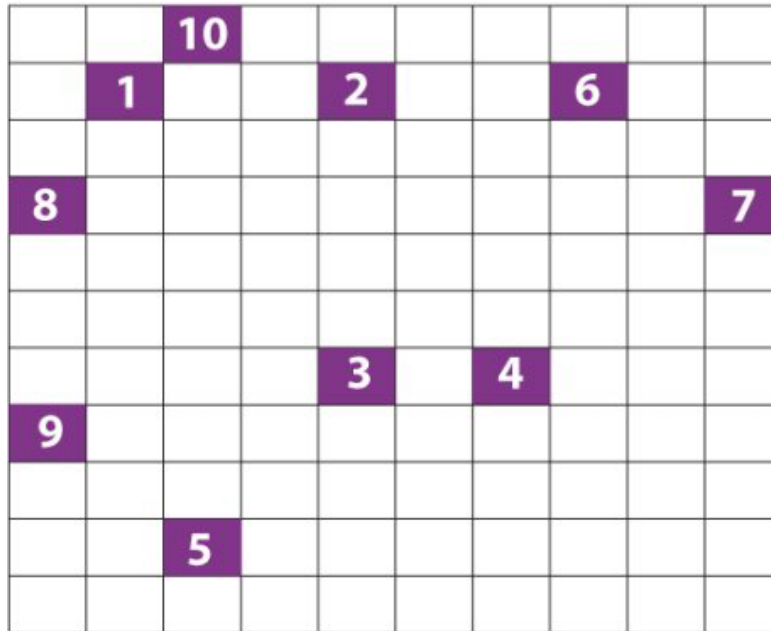
- (a) water and ozone
- (b) water and oxygen
- (c) ozone and oxygen
- (d) water and carbon dioxide

Q4. Which of the following is not a greenhouse gas?

- (a) Methane
- (b) Carbon dioxide
- (c) Carbon monoxide
- (d) Ammonia

- Q5. Ozone-layer is getting depleted because of
- excessive use of automobiles
  - excessive formation of industrial Units
  - excessive use of man-made compounds containing both fluorine and chlorine
  - excessive deforestation.

Complete the crossword puzzle (Fig.15.2)



Across

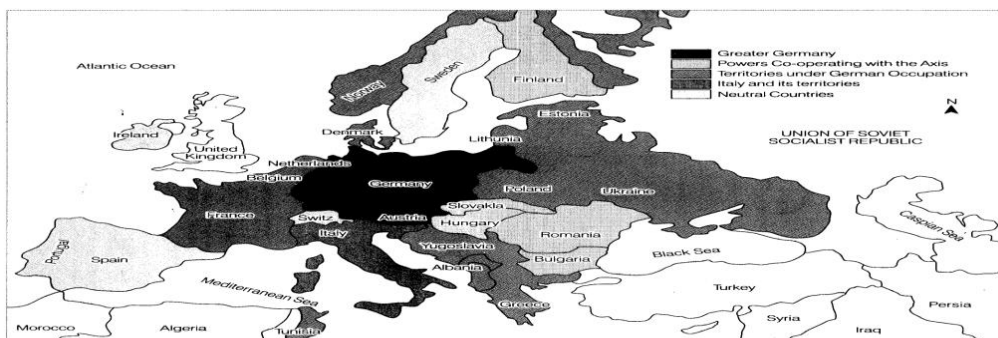
- Oil yielding plant (9)
- Crop grown in winter season (4)
- Fixed by Rhizobium (8)
- Common honey bee (4)

Downward

- Animal feed (6)
- A micronutrient (5)
- Unwanted plant in crop fields (4)
- An exotic breed of chicken(7)
- Bottom feeders in fish pond(7)
- A marine fish (4)

## Social Science

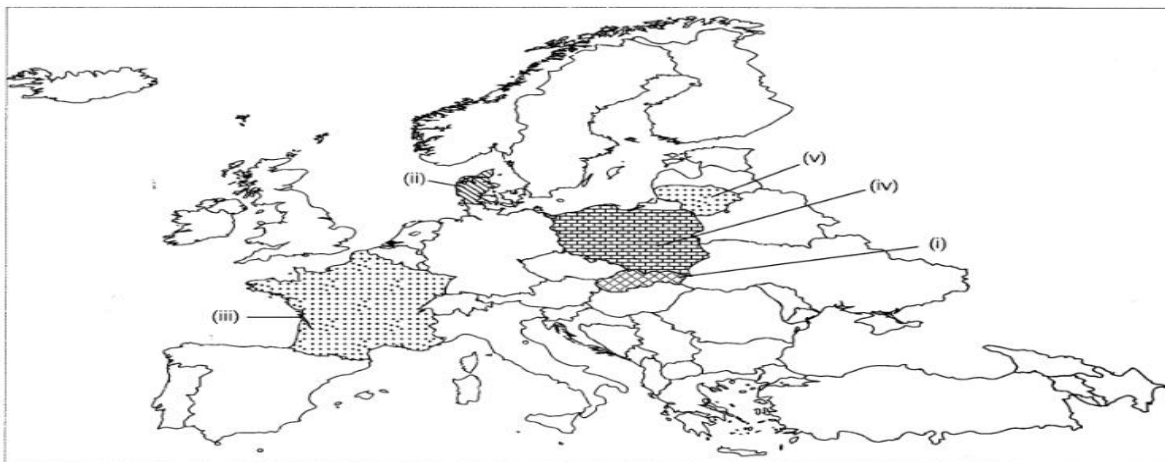
### Major Countries of Second World War



1. On the outline map of the world, locate and label the countries that were Axis Powers in Second World War.



2. On the outline map of Europe, certain features are marked. These are the countries that were once territories under German expansion. Identify them.



## **Geography**

Q1. Collect the data on SO<sub>2</sub>, NO<sub>2</sub>, CO<sub>2</sub>, CO or any other pollutant dated PRE DIWALI and POST DIWALI. Make multiple bar diagram by using the data and interpret it.

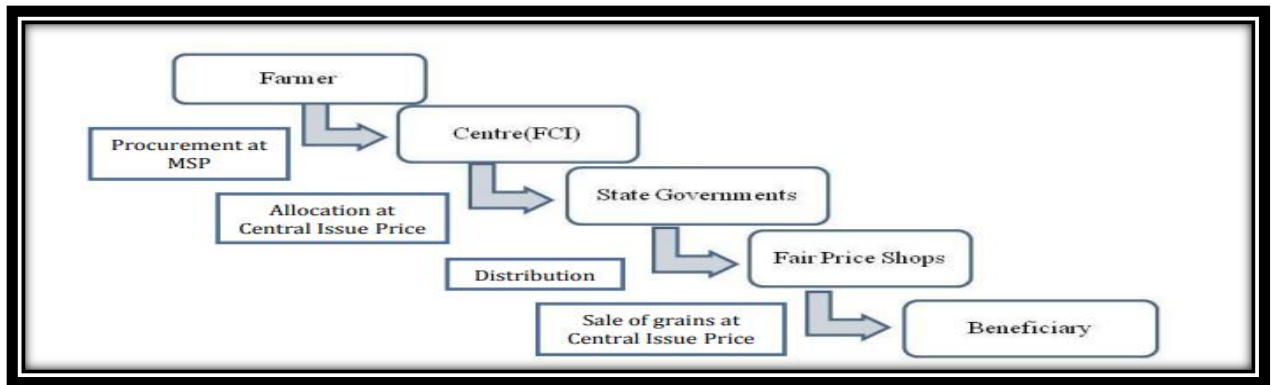
Interpretation must include

- a) Introduction of Topic
- b) Causes of pollution
- c) Consequence of pollution
- d) Solutions

Q2. Make a Map File and complete the map work of

- a) Rainfall Map
- b) Forest Map
- c) Wildlife Map

## Economics



### PUBLIC DISTRIBUTION SYSTEM IN INDIA

The Public Distribution System of India plays a crucial role in reducing food insecurity by acting as a safety net by distributing essentials at a subsidized rate.

Answer the following questions:

- Q (i) Name any two states of India who have efficient Public Distribution System.
- Q (ii) Give any three advantages of the PDS for the farmers in India.  
(Answer in 60-80 words.)
- Q (iii) Efficient PDS in a state minimizes poverty. Elaborate the statement.  
(Answer in 60-80 words.)  
(All answers to be written in the Economics note book.)

## AI

1. Choose any one topic and make a flipbook:

- Types of threats
- Cyberbullying
- Safety tips while using Internet Banking

## FMM

- Banks play an important role in financial stability and the economy of a country. Prepare a project on Banking highlighting different aspects of Banking i.e. How to open a Bank Account, different types of deposits and accounts, importance of electronic banking.
- Complete Module- Numeric Key Accelerator in NLT Nsmart, Software by NSE



## ATL

Prepare a ppt about your solution to the problems pertaining to following themes .

<b>Education</b>
Innovate to create solutions to make education and learning inclusive and resilient for all children - Those with no access to devices or internet (Mobiles,Laptops,TVs), those that are in regions with extreme weather conditions, those with no access to a school (physical or virtual)
Innovate to integrate soft skills (personality building, confidence etc.), technical skills (digital and 21st century skills) and a mindset of innovation in the curriculum for schools/colleges to ensure students have the skillsets to become successful entrepreneurs or professionals.
<b>Energy &amp; Transportation</b>
Innovate a system that could improve rider/driver(motorcycles, cars, trucks, and/or any other vehicle)/citizen (people and animals on the road) safety and prevent road accidents
Innovate solutions that reduce the carbon footprint as well as adopt climate-resilient and low-carbon strategies to enable the transition to truly sustainable India
<b>Health &amp; Nutrition</b>
Innovate solutions specifically solving problems faced by patients suffering from the most common diseases of India. You can choose a disease from this list or pick another disease to create a solution - Diabetes, Anaemia, Tuberculosis, Malaria, Typhoid or others
Innovate to build solutions to find novel ways to address health and nutrition challenges such as malnutrition, obesity etc.
<b>Social Inclusion</b>
Innovate to create a sustainable model for financial inclusion which will help India get closer to the goal of no poverty by providing accessible and affordable financial services to all.
Innovate to create solutions to build inclusivity in the society in terms of languages and cultures so that localised access can be made possible for information related to education, financial literacy and government policies/schemes

- ✚ Presentation should not be more than 15 slides .
- ✚ Students can do it as individual or in team of not more than 3 students .
- ✚ Deadline for submission : 8<sup>th</sup> January 2021.
- ✚ While ideating ,please refer following stages of design thinking .



**NOTE: THERE WILL BE A COMMON PRESENTATION OF HOLIDAY HOMEWORK AFTER THE SCHOOL REOPENS**

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**STAY SAFE, STAY HEALTHY, AND**

**HAPPY LEARNING** 😊 😊 😊