<u>CLASS 7: HOLIDAY HOMEWORK</u> <u>SESSION 2023-24</u>

Theme: "Integrated Approach in Science and Technology for Sustainable Future"



Guidelines for Homework:

- All projects must be handwritten.
- Subject-wise homework should be prepared separately.
- Do the homework on file pages.
- The cover page should show the School's name, Logo, Student's name, Class, Section and Subject.
- The second page should be about acknowledgement.
- Each topic should be written on a new page.
- Marks will be deducted for spelling and grammatical errors.
- Submit the homework in a handmade file cover.
- There are four questions in every subject. Each question carries 5 marks.

English Language

Write an essay in 250 words .

Inventions in new technologies are leading to developments making human lives easy but at the same time adversely impacting the lifestyle of the people, leading to physical and mental health issues.

Write a letter to your friend highlighting the importance of regular exercise and good eating habits in maintaining good health.

English Literature

Q.1. Enjoy the poem written below and write its central idea in not more than 100 words.

In our world of modern tech,

We've got gadgets to check and inspect, From smartphones to laptops, we connect, Our lives are digital, that's the effect.

We swipe and tap with such ease,

And access information with such breeze, Innovation has us on our knees, Our lives have changed, that's what we seize.

With the power of coding and AI, We can automate tasks and simplify, Our lives are streamlined, we can't deny, Tech has transformed us, that's no lie.

But with all this power and speed, There are some drawbacks that we heed, Our privacy and security, we must feed, Tech can be a double-edged breed.

We must use technology with care, And not let it consume us like a snare, Balance is key, let's be aware, So we can enjoy tech without a scare.

In conclusion, tech is here to stay, And it's up to us to find our way, Let's use it wisely every day, And make the most of it, come what may.

Q. 2. Write a short story that incorporates a scientific concept or technology (such as time travel or cloning). Use your imagination to create an imaginary cartoon character. Write about it and also give a title to your composition.

Q.3.Read the book "The Time Machine" by H.G. Wells and write a book report on it. Include your thoughts on how the book explores the relationship between science/technology and society.

Q4. Translate the following paragraph to English.

भारत के सतत विकास में विज्ञान और प्रौद्योगिकी की भूमिका अत्यंत महत्वपूर्ण है। विज्ञान और प्रौद्योगिकी के विकास से भारत में नई तकनीकों का उद्भव हुआ है जो देश के स्वर्णिम भविष्य की तरफ बढ़ते कदमों को दर्शाते हुए हैं। भारत में आधुनिक तकनीकों के विकास से लोगों के जीवन में सुधार हुआ है, विभिन्न क्षेत्रों में समृद्धि हुई है, और भारत को दुनिया के अग्रणी देशों में से एक बनाने की दिशा में अग्रसर बनाया है। इसलिए, भारत के सतत विकास में विज्ञान और प्रौद्योगिकी का समर्थन और विकास महत्वपूर्ण है।

<u>हिंदी- 1 (Hindi Language)</u>

1. 'विज्ञान और प्रौद्योगिकी' में अंतर स्पष्ट करते हुए, इनके संक्षिप्त इतिहास और महत्त्व को स्पष्ट कीजिए । (शब्द सीमा 300)

 'भारत के सतत विकास में विज्ञान एवं प्रौद्योगिकी की भूमिका' - इस विषय पर तर्कपूर्ण निबंध लिखिए । (शब्द सीमा 300)

<u>हिंदी- 2 (Hindi Literature)</u>

प्र.1. 'विज्ञान मानवहित के लिए है, अहित के लिए नहीं।' इस विषय पर 'मशीनी मानव' पाठ के आधार पर अपने विचार प्रकट कीजिए। (200 शब्द)

प्र.2. कवि गोपालदास 'नीरज' जी का जीवन परिचय लिखिए। (200 शब्द)

प्र.3. 'शापमुक्ति' पाठ का सारांश लिखिए।

COMPUTER SCIENCE:

Make your project on the basis of following points:

- 1. How Computers/ technology are being used for Sustainable development of Future?
- 2. What new approaches should be integrated in computing to ensure the sustainable development of Future.
- 3. Discuss the role of A.I. (Artificial Intelligence) for sustainable development of Future.
- 4. Categories the Devices/Hardware components which helps in sustaining future in term of Input and Output.

HISTORY/CIVICS:

1. Make a plan to visit a Tibetan Buddhist Monastery, Sarnath meet a monk or a nun. Interview them about their schedule, dress code, and other relevant details. (Be respectful and mindful of their time.) Record the interview and prepare a report on it in 100-150 words.

2. Create a book that highlights the different aspects of the Indian Constitution, such as its history, key provisions, and significance. You can use different colours and illustrations to make the book engaging and informative.

3. **CONSTANITOPLE OR NALANDA** This is the name of a place. Use the alphabets given in it to form names of places, persons and things. Let's see how many you can make.

4. Write the role of government in promoting an integrated approach to science and technology for a sustainable future.

OR

In what way education and public awareness help to promote an integrated approach to science and technology for a sustainable future?

Geography:

Word Limit- 150 to 200

1. Write causes and impacts of ozone depletion, including the role of human activities such as the use of chlorofluorocarbons (CFCs) and other ozone-depleting substances. Investigate the role of the United Nations and legislative bodies in addressing and mitigating ozone depletion.

2. Create a visual chart or a poster that display the different conventional sign and symbols, such as political boundaries, types of settlements, roads, railways etc.

3. Create a project to make your school campus more eco-friendly. You can start by identifying areas where energy is being wasted, such as classrooms, corridors, and offices. You can then come up with innovative solutions to reduce energy consumption, such as using solar panels, energy-efficient light bulbs, and renewable energy sources. Use pictures or diagrams related to it.

4. Write down the ways to reduce transportation-related emissions by promoting alternative forms of transportation, such as cycling, walking, and carpooling. You can also research and advocate for the use of electric vehicles and public transportation.

PHYSICS

Q-1. why is sustainable development so often associated with protecting the environment?

Q-2. Explain how to protect, restore and promote the sustainable uses of electricity and light energy.

Q-3. Explain different types of motion based on path travelled, time period, repetition and occurrence. Give examples also to support your answer.

Q-4. Explain different types of energy production and conversion for sustainable development in environment.

CHEMISTRY

Q-1. Write the role of technology and science for environment sustainability.

Q-2. How soil organic carbon is one of the three global indicators of land degradaty neutrality (LDN).

Q-3. Write at least ten examples of change of state of matter in every day Life.

Q-4. Explain interconversion of states of matter with examples.

BIOLOGY:

Q.1. Microorganisms are diverse and ubiquitous in nature. They play vital role in nutrient cycle, disease and biotechnology and offer numerous benefits to humans. List out any five microorganisms that are beneficial for human beings. Also write their importance in our life.

Q.2. Prepare a chart and write down the name of any five diseases that are caused by microorganisms and their causative agents. Also mention their symptoms.

Q.3. A minor cut on skin causes bleeding. But it stops after sometimes automatically. Explain the reason.

Q.4. Unstriated and cardiac muscles both are involuntary. How would you differentiate between both of them?

Q.5. What is Thalassemia ? Write its' causes and symptoms.

MATHEMATICS:

- Q1. Transportation is the major source of green house gas emissions but new technologies like electric and self driving vehicles could significantly reduce these emissions.
 - a. Find out the emission of green house gases from 2000 to 2022.

b. In which year was the emission at the highest level and in which year it was at the lowest level?

c. What is the difference between them?

d. Represent the given data graphically. (Bar Graph)

Q2. With the rapid development of communication, control and computer technologies in the last several decades, automatic train operation, for which the driver no longer has to cautiously operate the control handle, is emerging in many urban rail systems to replace traditional manual driving in recent years.

a. A train travelling at 60 kmph crosses a man in 6 seconds. What is the length of the train?

b. A train travelling at 60 kmph crosses another train travelling in the same direction at 50 kmph in 30 seconds. What is the combined length of both the trains?

c. Train A, 600 m long is running at 80 kmph will take how much time to cross a man sitting in another train which is 400 m long, running at 64 kmph in the opposite direction?

d. The distance between two places A and B is 570 kms. A train starts

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from A at 50 kmph at 6 am and another starts from B at 80 kmph at am towards each other. At what time will they meet?

Q3. Solve the Practice Sheet in Maths Practice Note Book.

Art & Craft:

Make a dreamcatcher with waste materials

