BIRLA PUBLIC SCHOOL, PILANI

SUMMER VACATION HOMEWORK-2025-26

CLASS-IX

SUBJECT- ENGLISH

1. Write about the life and work of each of the following writers in 250 words. (Any two).

i) Mulk Raj Anand ii) Ruskin Bond iii) R.K.Laxman

iv) Sudha Murthy v) Oscar Wilde vi) O. Henry

2. Write a short story / an interesting incident happened to you or any of your family members or friends during summer vacation in 150 to 200 words.

3. Watch your mother working in the kitchen and learn how to make any two recipes and write about them in 200 words.

विषय - हिंदी

1. कहानी 'दो बैलों की कथा' के आधार पर सिद्ध कीजिए कि संगठन में शक्ति होती है I (उत्तर सीमा 100 शब्द)
2. मोती और हीरा ने विपत्ति में एक-दुसरे का साथ दिया I इससे हमें क्या शिक्षा मिलती है I (उत्तर सीमा 100 शब्द)
3. परियोजना कार्य – अपनी पाठ्यपुस्तक के अतिरिक्त कबीरदास जी के दस दोहों का संकलन कीजिए तथा कलात्मक ढंग से चार्ट पेपर पर सजाकर लिखिए I

विषय - संस्कृत

मणिका (संस्कृत - अभ्यास -पुस्तकम्) प्रथमा भागः (नवमः अभ्यासः - रचनात्मक कार्यम्) के आधार पर -

पत्रलेखनम् - 1 - 5

चित्रवर्णनम् - 1 - 5

अनुच्छेदलेखनम् - 1 - 5

कथापूर्तिः 1 - 5

संवादलेखनम् 1- 5

रामः , फलम् , लता के शब्द रूप कंठस्थ करें

पठ , भू धातु के पांचों लकारों के रूप स्मरण करें।

SUBJECT- FRENCH

1. Mettez les phrases au négatif.

(a) Tu bois du coca. (b) C'est un beau garçon. (c) Il y a des hommes dans le parc. (d) Elle est américaine. (e) Il parle chinois.

2. Répondez aux questions suivantes.

(a) Quel monument trouve-t-on à Mumbai? (b) Comment s'appelle la peinture de Mona Lisa? (d) Combien de laungues vous parlez?

3. Décrivez: (4 Lines for each one)

(a) La tour Eiffel (b) Notre-Dame (c) Le Louvre

SUBJECT – MATHEMATICS

1. (PROJECT -1) ART INTEGRATION WITH MATHS

What to do: Make a presentable Art work using square root spiral for your class room.
How to do:
a. you already know to draw square root spiral.
b. use as much spiral for your art work as you can.
Where to do: On chart paper (as per your requirement)
Parameters:
(i) Creativity
(ii) Neatness
(iii) Presentation

2. **PRACTICE TIME**

What to do:
a) Do chapter1 of exemplar maths book class 9. Solve completely all questions with suitable method and steps.
Where to do: In Practice Note Book.
Parameters:
(i) Content
(ii) Accuracy

3. IT'S TIME TO DECORATE MY OWN CLASS

Make a presentable chart for your classroom on any topic from your Maths Book.

SUBJECT- PHYSICS

Instructions:

1. Summer assignment is the part of internal assessment so complete the assignment and submit just after the summer break.
2. Do the assignment as per the instructions given in each question.

SUBJECT-PHYSICS

1. Prepare a PPT on the topic "conservation of energy" that should include the presentation of a working model along with principal involved, material required for construction procedure of construction and the contribution of this model for the benefit of society, if at all it is used as a technology. (Take the printout of the PPT)

2. Draw a poster showcasing Renewable energy sources.

3. In a scrap book or file
   a. Draw the different types of graphs showing different types of motion. (from motion chapter)

   b. Draw the diagram of at least five examples from real life showing 'Newtons Third law of motion'.

SUBJECT- CHEMISTRY

1. Investigative Chart Making: States of Matter

- Objective: Create an investigative chart that not only explains the states of matter but also explores unusual states and their applications.

- Instructions:

- Title: "Exploring States of Matter"

- Basic States: Define and describe solids, liquids, and gases.

- Unusual States: Investigate and explain at least two unusual states of matter (e.g., plasma, Bose-Einstein condensate).

- Applications: Research and present real-world applications of these states (e.g., plasma in neon signs, Bose-Einstein condensate in quantum computing).

- Illustrations: Include diagrams, pictures, and any relevant data.

- Materials: Use a large sheet of paper or a poster board, markers, coloured pencils, and any other decorative materials.

2. Investigative Project Work: Interconversion of States of Matter

- Objective: Conduct an investigative experiment to explore the interconversion of states of matter and the factors affecting it.

- Instructions:

- Title: "Investigating Interconversion of States of Matter"

- Experiment: Choose an experiment that demonstrates the change from one state to another and investigates factors like temperature and pressure (e.g., sublimation of dry ice, condensation of steam).

- Procedure:

- Materials Needed: List all materials required for the experiment.

- Steps: Write a detailed, step-by-step procedure.

- Variables: Identify and manipulate variables (e.g., temperature, pressure) to see their effects.

- Observations: Record detailed observations and take measurements.

- Conclusion: Analyze the results and explain the scientific principles behind the interconversion.

- Presentation: Create a detailed report or a digital presentation (using PowerPoint or a poster) to showcase your experiment, including pictures or videos if possible.

3. Research Work: Indian Scientist

- Objective: Conduct an in-depth investigation into the life and work of an Indian scientist who has made significant contributions to chemistry.

- Instructions:
  - Title: "Investigating the Life and Work of [Scientist's Name]"
  - Content:
    - Biography: Write a detailed biography of the scientist.
    - Contributions: Investigate and describe their major contributions to chemistry.
    - Impact: Analyze how their work has impacted science and society.
    - Interviews: If possible, include interviews or quotes from experts or people who have worked with the scientist.
  - Presentation: Present your findings in a comprehensive written report or a digital presentation.

Submission Guidelines

- Format: All work should be neatly presented and well-organized.

- Deadline: Submit your completed assignment by the first day of the new school term.

- Evaluation: Your work will be evaluated based on creativity, accuracy, completeness, and presentation.

- Instructions:

- Use materials like clay, styrofoam balls, or any other craft supplies to build the model.

- Label each part of the model clearly.

SUBJECT– BIOLOGY

1. Prepare a project report by collecting information about the topics

given below:

a) Electron microscope. b) Importance of osmosis in plants and animals.

SUBJECT: SOCIAL SCIENCE

Mark the following MAP ITEMS on blank maps and paste them in the Geography and History notebook.

SUBJECT - HISTORY

Chapter-1: The French Revolution

Outline Political Map of France (For locating and labelling / Identification)

□ Bordeaux □ Nantes □ Paris □ Marseilles

Chapter-2: Socialism in Europe and the Russian Revolution

Outline Political Map of World (For locating and labelling / Identification)

□ Major countries of First World War

(Central Powers and Allied Powers)

Central Powers - Germany, Austria-Hungary, Turkey (Ottoman Empire)

Allied Powers - France, England, Russia, U.S.A (United States of America).

Chapter-3: Nazism and Rise of Hitler

Outline Political Map of World (For locating and labelling / Identification)

 Major countries of Second World War

Axis Powers – Germany, Italy, Japan

Allied Powers – UK (United Kingdom), France, Former USSR, USA (United States of America)

 Territories under German expansion (Nazi Power)

Austria, Poland, Czechoslovakia (only Slovakia shown in the map), Denmark,

Lithuania, France, Belgium

SUBJECT – GEOGRAPHY (Outline Political Map of India)

Chapter -1: India-Size and Location

 India-States with Capitals, Tropic of Cancer, Standard Meridian (Location

and Labelling)

Chapter -2: Physical Features of India

 Mountain Ranges: The Karakoram, The Zasker, The Shivalik, The Aravali, The

Vindhya, The Satpura, Western & Eastern Ghats

 Mountain Peaks – K2, Kanchan Junga, Anai Mudi

 Plateau - Deccan Plateau, Chotta Nagpur Plateau, Malwa Plateau

 Coastal Plains - Konkan, Malabar, Coromandal & Northern Circar (Location and

Labelling)

Chapter -3: Drainage

 Rivers: (Identification only)

o The Himalayan River Systems-The Indus, The Ganges, and The Satluj

o The Peninsular Rivers-The Narmada, The Tapi, The Kaveri, The Krishna,

The Godavari, The Mahanadi

 Lakes: Wular, Pulicat, Sambhar, Chilika

Chapter - 4: Climate

 Areas receiving rainfall less than 20 cm and over 400 cm (Identification only)

Chapter - 5: Natural Vegetation and Wildlife

 Vegetation Type: Tropical Evergreen Forest, Tropical Deciduous Forest, Thorn

Forest, Montane Forests and Mangrove- For identification only

 National Parks: Corbett, Kaziranga, Ranthambor, Shivpuri, Kanha, Simlipal & Manas

 Bird Sanctuaries: Bharatpur and Ranganthitto

 Wildlife Sanctuaries: Sariska, Mudumalai, Rajaji, Dachigam (Location and

Labelling)

Chapter - 6: Population (location and labelling)

 The state having highest and lowest density of population.

SUBJECT – AI

Solve the following questions, based on your understanding of Artificial Intelligence.

(in your notebook)

Part 1: Understanding AI Concepts

1. **What is Artificial Intelligence (AI)?**
    - Define AI and explain its significance in today's world.
    - Describe the difference between AI and Human Intelligence.
2. **Explain the three types of AI.**
    - Briefly describe the following types of AI:
        - Narrow AI
        - General AI
        - Superintelligent AI
3. **Applications of AI:**
    - List at least 5 real-life examples of AI applications. Provide a short description for each example, explaining how AI is being used.
4. **What are the key components of AI systems?**
    - Explain the key components that make up an AI system, such as data, algorithms, machine learning, and neural networks.

Part 2: Exploring AI in Daily Life

Research and write about the impact of AI in everyday life. Answer the following:

1. **AI in daily life:**
    - Name at least 3 devices or applications you use daily that involve AI (e.g., smartphones, voice assistants, recommendation systems).
    - How does AI improve the performance or experience of these devices/apps?
2. **AI in various industries:**
    - Choose one industry (e.g., healthcare, automotive, entertainment, or education) and explain how AI is used in that industry. Provide specific examples.

Part 3: Hands-On Activities

Complete the following practical tasks to get a hands-on understanding of AI.

1. **Voice Assistant Task:**
    - If you have access to a voice assistant (like Alexa, Siri, or Google Assistant), ask it about "What is AI?" and note its response. Write a short analysis of how the assistant understood and responded to your query.

Part 4: Research Questions

Choose one of the following topics and write a detailed report:

1. **History of AI:**
    - Write a brief history of AI, starting from its origins to present-day advancements. Focus on key milestones, like the creation of the first AI programs or the introduction of machine learning.
2. **Ethics of AI:**
    - Discuss the ethical implications of AI, such as privacy concerns, biases in algorithms, and the potential for AI to replace human jobs. What are the ethical challenges that society faces due to the advancement of AI?

Part 5: Make a colourful chart on any AI / Ciber Safety related topic.

(Suggestions : - AI Project Cycle , SD Goals , Neural Networks , Tree Structure of AI Modelling , Ciber Safety , Cyber Security , Real life AI Applications)

NOTE:- STUDENTS MUST SUBMIT SUMMER VACATION HOMEWORK TO ALL THE SUBJECT TEACHERS SEPARATELY AFTER VACATIONS.

LIBRARY (MIDDLE SECTION)
CLASS: IX-X

SUGGESTED BOOKS FOR READING IN SUMMER VACATION

S. No.	Title of Book	Author's Name
1	The Power of Subconscious Mind	Joseph Murphy
2	Paths of Glory	Jeffrey Archer
3	A Storm of Swords- Blood and Gold	George R. R. Martin
4	The Ship of Adventure	Enid Blyton
5	Malgudi Schooldays	R. K. Narayan
6	A Star in Space- Sunita Williams	Ravinda Anantharaman
7	Impatient Optimist Bill Gates in his own words	Bill Gates
8	The Monk Who Sold His Ferrari	Robin Sharma
9	The Day I Stopped Drinking Milk	Sudha Murty
10	Left Brain, Right Stuff	Phil Rosenzweig
11	Antony and Cleopatra	William Shakespeare
12	Geronimo Stilton- The Stinky Cheese Vacation	Elisabetta Maria Dami
13	Goosebumps- The Ghost Next Door	R. L. Stine
14	Tenali Raman	Kavitha Mandana
15	Tamas	Bhisham Sahni
16	Setting of A Cruel Sun	Alan Gibbons
17	Godan	Premchand
18	Infinity- The Quest of Think the Unthinkable	Brian Clegg
19	Making India Awesome	Chetan Bhagat
20	The Fever Code	James Dashner
21	How to Get Ideas	Jack Foster
22	Kya Bhulu Kya Yad Karu (Hindi)	Harivansh Rai Bacchan
23	The Adventures of Sherlock Holmes	Arthur Conan Doyle
24	Sri Krishan Kumarji Birla Bahumukhi Pratibha ke Dhani (Hindi)	Parshuram Sudhakar
25	Gora	Rabindranath Tagore