केन्द्रीय विद्यालय राजौरी

विद्यालय गृहकार्य

अवकाश गृहकार्य

Class – 7th

Science

1) Animal Adaptations to Heat

• Task: Research and illustrate how animals in nature use or prevent heat transfer to survive.

• Activity: Choose two animals (e.g., a desert fox with big ears to radiate heat, and a polar bear with thick blubber to stop conduction). Write 3-4 lines for each with neat sketches.

2) Geothermal Heat Conduction: Research how temperature changes as you go deeper into the Earth's crust. Identify which mode of heat transfer is primarily responsible for bringing thermal energy from the Earth's molten core toward the crust.

3) Survival in Polar Regions: Penguins live in freezing Antarctic conditions. Gather information on how their huddling behavior, combined with their dense feathers and layer of blubber, minimizes heat loss through conduction, convection, and radiation.

ARTS EDUCATION

1: Primary and Secondary Colours*

Draw 2 big circles. In the first, fill Primary Colours – Red, Yellow, Blue. In the second, fill Secondary Colours – Orange, Green, Purple. Write how secondary colours are made.

2: My School*

Draw your school building. Include the national flag, playground, and 2 trees.

3: Warli Art*

Draw Warli tribal art showing 5 people working in a farm. Use only black pen on white paper.

4: Leaf Printing*

Take 3 different leaves, apply colour on them and print on paper. Make a tree using those prints.

5: Festival Scene*

Draw a festival scene – Diwali or Eid. Show lamps / moon, houses and people celebrating.

English

1.Prepare a PowerPoint presentation on the chapters assigned to each group in the classroom.

2. *Prepare a travel brochure on any one state or Union Territory of India.*

Your brochure must highlight the following key features:

Cultural Heritage & Vibe: What makes the state or union territory unique? Mention local traditions, festivals, and language.

Famous Cuisines & Street *Food:* Signature dishes, famous sweets, and iconic places to eat.

Traditional & Local Attire: Unique dress styles, traditional clothes, or famous local textiles/shopping items.

Top Sightseeing Spots: 3–4 must-visit landmarks, historical monuments, or nature spots.

Traveler Essentials: Best time to visit, how to travel locally, and a catchy slogan/tagline on the front cover.

कक्षा - सप्तमी (Class 7)

विषय: हिन्दी (NCERT – मल्हार / वसंत)

दिवस कार्य विवरण

दिवस 1 Term-2 के किसी एक गद्य पाठ का गहन अध्ययन करें और पाठ के आधार पर 5 स्व-निर्मित बहुविकल्पीय प्रश्न (MCQs) उत्तर सहित तैयार करें।

दिवस 2 विशेषण और क्रिया की परिभाषा लिखते हुए उनके भेदों को फ्लोचार्ट (Flowchart) के माध्यम से दर्शाइए।

दिवस 3 'समय का सदुपयोग' अथवा 'अनुशासन का महत्व' विषय पर 120-150 शब्दों में निबंध/अनुच्छेद लिखिए।

दिवस 4 मुहावरे (15) अर्थ सहित लिखिए तथा उनका अपने वाक्यों में प्रयोग कीजिए।

दिवस 5 अपने विद्यालय के प्रधानाचार्य को 3 दिन के अवकाश हेतु एक औपचारिक प्रार्थना-पत्र लिखिए।

दिवस 6 'जल संरक्षण' (Save Water) विषय पर एक रचनात्मक स्लोगन और आकर्षक विज्ञापन तैयार कीजिए।

दिवस 7 शीतकाल में किसी दर्शनीय स्थल या ऐतिहासिक स्थल के भ्रमण का अनुभव 100 शब्दों में साझा कीजिए।

दिवस 8 संधि (स्वर संधि के प्रमुख भेद - दीर्घ, गुण) के 10 उदाहरण नियम सहित लिखिए।

दिवस 9 Term-2 की किसी एक प्रेरक कविता का भावार्थ अपने शब्दों में लिखिए।

दिवस 10 'इंटरनेट: वरदान या अभिशाप' विषय के पक्ष या विपक्ष में अपने विचार (10 वाक्य) लिखिए।

विषय संस्कृतम् (NCERT – रुचिरा भाग-2 / तत्समकक्ष)

दिवसः कार्यविवरणम्

दिवसः 1 पाठ्यपुस्तकस्य Term-2 भागस्य एकं पाठं पठित्वा तस्मात् पाठात् पञ्च (5) प्रश्नोत्तराणि स्वयमेव रचयत।

दिवसः 2 'मुनि' अथवा 'अस्मद्' / 'युष्मद्' शब्दरूपाणि शुद्धतया लिखत स्मरत च।

दिवसः 3 'कृ' अथवा 'भू' धातोः लट्, लृट्, लङ्-लकारयोः रूपाणि उत्तरपुस्तिकायां लिखत।

दिवसः 4 एकविंशतितः पञ्चाशत्पर्यन्तम् (21 तः 50) संख्यावाचकशब्दान् संस्कृतेन लिखत।

दिवसः 5 पञ्च (5) सुभाषितानि (नीतिश्लोकान्) अन्वय-भावार्थसहितं स्मृत्वा लिखत।

दिवसः 6 'मम विद्यालयः' अथवा 'मम प्रियः शिक्षकः' इति विषये पञ्च (5) संस्कृतवाक्यानि रचयत।

दिवसः 7 उपसर्गाणां (प्र, परा, अप, सम्, अनु, अव इत्यादि) प्रयोगं कृत्वा दश (10) क्रियापदानि रचयत।

8 कत्वा, ल्यप्, तुमुन् प्रत्ययानां प्रयोगं दर्शयित्वा पञ्च (5) वाक्यानि रचयत।

दिवसः 9 संस्कृते दिनचर्या-सम्बद्धानां पञ्च (5) वाक्यानां रचनां कुरुत।

दिवसः 10 एकस्याः लघुकथायाः (चित्रकथायाः) पञ्च वाक्यानि संस्कृतेन मञ्जूषासहायतया लिखत।

Computer

AI Applications & Smart Systems

• Activity 1(Types of Data): Collect or draw examples of the 4 main types of data used to train AI: Text, Image, Audio, and Video.

• Activity 2(Case Study / Pamphlet or Poster): Create a short write-up or poster on a specific AI application—such as AI in Education, Healthcare, or Defense (detailing how drones, facial recognition, or smart sensors work).

• Activity 3(AI Terminology): Write down and define any 5 key AI terms (e.g., Machine Learning, Algorithm, Dataset, Bias, Chatbot, Automation, Smart Device, Neural Network, Facial Recognition, Voice Recognition).

ARTS EDUCATION – CLASS 7- HOMEWORK

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MATHEMATICS HOLIDAY ASSIGNMENT

Class VII

Student Name: _____ Roll No.: _____

General Instructions: Attempt all questions with neat step-by-step mathematical reasoning. Think creatively and explore multiple approaches where applicable.

Question 1: [Number Play & Divisibility]

A 5-digit secret lock code is of the form:

5 A 7 B 2

- The 5-digit number is divisible by both 4 and 9.

- A and B represent single digits (0 to 9), with the condition that A > B.

Find all possible values of the digit pair (A, B) that successfully unlock the code. Show your mathematical reasoning.

Question 2: [Lines & Angles]

At exactly 3:40 PM, the hour and minute hands of an analog clock point in different directions.

- Calculate the exact angular position of the minute hand starting from 12 o’clock.

- Calculate the exact angular position of the hour hand starting from 12 o'clock, accounting for the 40 minutes past 3.

Determine the measure of the smaller angle formed between the hour hand and the minute hand.

Question 3: [Integers & Balancing]

An ancient merchant has a two-pan beam balance and only three standard weight stones:

1 kg, 3 kg, 9 kg

- Weights can be placed on either side of the balance (either together with the rice or on the opposite pan).

Write down the exact balancing equations showing how the merchant can weigh:

(a) Exactly 2 kg of rice

(b) Exactly 5 kg of rice

© Exactly 7 kg of rice

Question 4: [Symmetry & 3D Shapes]

A curious ant sits at corner vertex A of a solid wooden cube of side length 6 cm. It wants to travel to the diagonally opposite vertex B on the far side of the cube.

(a) If the ant is allowed to crawl ONLY along the outer edges of the cube, what is the length of the shortest path? How many such shortest routes exist?

(b) If the ant is free to crawl across the outer surfaces (faces) of the cube, what is the length of the shortest route? (Hint: Think about unfolding the cube faces into a flat net).

Question 5: [Data Handling & Samamiti (Averages)]

Rohan played 5 innings in an inter-school cricket tournament and maintained an average (samamiti) of 24 runs.

(a) In his 6^{th} inning, Rohan scores 60 runs. What is his new batting average across all 6 innings?

(b) How many runs should he have scored in the 6^{th} inning if his goal was to raise his overall batting average to exactly 32 runs?

CLASS VII – SOCIAL SCIENCE

A. Activity: Farming in Your Family/Locality

1. How much agricultural land does your family own or cultivate? If your family does not farm, collect information from a farmer in your neighbourhood.
2. What farming activities are carried out by your family or the farmer you interviewed?
3. Which crops are grown in the field?
4. What tools and machines are used for farming?
5. Prepare a crop calendar showing the sowing and harvesting seasons of major crops.
6. Draw and label the stages of the farming cycle.
7. Make picture cards of different crops. Write the name of each crop below its picture.