ARMY PUBLIC SCHOOL

MEERUT CANTT(2024-25)

Holiday Homework for class IX (English)

1. Download Reading App from Play Store or Apple Store, register your self and read at least one book of your choice and write its Review.

2. **Activity 1**: Make a to Do List After learning about the precautionary advisory from Meteorological Dept., how will you be prepared for an emergency during strong winds?
   Activity 2: Know about safety Rules when high wind threat is there:
   1. Which is the safest place during strong winds?
   2. If you are caught outside during high winds?
   3. If one is driving?
   4. In the event of a downed power line?

Reference Links: Havoc created by strong winds https://youtu.be/D-YnXrit2Uo

   3.Read the newspaper everyday. Write three news headlines and news in your own words per week.

   4.Recapitulate all work done in English so far and prepare for Unit Test One.

ग्रीष्मावकाश गृहकार्य

कक्षा IX

विषय हिंदी

*अपने आस पास होने वाले विकास कार्यों, नए निर्माण कार्यों, कूड़ा कचरा की तस्वीरें लें।

* ली गई तस्वीरों को फाइल में चिपकाएं।

* चिंतन - मनन करें व दिए गए गए प्रश्नों के उत्तर दें-

* विकास को अधिक टिकाऊ बनाने के लिए एक नागरिक के रूप में मैं क्या कर सकता हूं?

। *सतत विकास को अक्सर पर्यावरण की सुरक्षा से क्यों जोड़ा जाता है?

*सीमित प्राकृतिक संसाधनों का इस तरह से उपयोग करें कि भविष्य में वे हमारे लिए समाप्त न हो जाएं ' विषय पर दो युवाओं की बातचीत को संवाद के रूप में लिखें।

ग्रीष्मावकाश गृहकार्य-2024-25

विषय-संस्कृत

कक्षा-9

1-गायत्री मन्त्र को हिन्दी अर्थसहित लिखो |

2-अपना परिचय संस्कृत में 5 वाक्यों में लिखो |

3-संस्कृत की एक कहानी को कॉपी में संस्कृत में ही लिखो |

4-गीता के पाँच श्लोकों को अर्थसहित लिखो |

5-उकारांत "गुरु" शब्द और इकारान्त "हरि" शब्द के रूप लिखो|

6-नी और गम् धातु के रूप पाँचों लकारों में लिखो |

7-मणिका पुस्तक के पाठ 1 से आपने क्या सीखा ? लिखो |

नोट-सारा कार्य बहुत स्वच्छता से अपनी संस्कृत कॉपी में ही कीजिए |

CLASS IX

HOLIDAY HOMEWORK (2024-25)

THEME - SCIENCE, ENVIRONMENT AND SUSTAINABILITYSUBJECT - SCIENCE

1. Make a **Multidisciplinary Project** on 'How studying different academicsubjects can help in managing disasters

2. Prepare **Assertion Reasoning** questions from -
- Matter in our Surroundings
- Motion
- Laws of Motion

3. Make one **Art Integrated model** on any of the following -
- Types of Muscle cells
- Nerve Cell
- Prokaryotic Cell
- Eukaryotic Cell

CLASS – IX
HOLIDAY HOMEWORK
SOCIAL SCIENCE

Instructions

1. Use A4 Sheets
2. Make sure your work is neat and clean.
3. Use proper handmade drawings wherever required.
4. Understand the listed assignment very well.
5. Submit the holiday homework in a proper folder or file and make sure that your work is completed in all respect.

1. **AIL PROJECT: Prepare a PPT based on:-**

   Make a comparative study of Uttar Pradesh, Arunachal Pradesh and Meghalaya, and prepare a report on-   do any one out of A,B&C * only 8 slides only(including diagram or pictures, flow chart and information Collect the data from secondary sources like newspaper and magazines).

A. Major economic activities in Uttar Pradesh, Arunachal Pradesh and Meghalaya
B. Major political issues like Lack of Medical facilities in pandemic time and farmers issues etc in Uttar Pradesh and Arunachal Pradesh / Meghalaya
C. Collect the data Literacy rate and status of women.

2. **Prepare a file project file disaster management related project. The Project Report should be handwritten by the students themselves .**
   Minimum 25 pages
   HEADINGS
   1. **HEADING PAGE**
   2. **ACKNOWLEDGEMENT**
   3. **INDEX**
   4. **INTRODUCTION TO TOPIC**
   5. **LOCATION**
   6. **CAUSES**
   7. **MEASURES**
   8. **DO'S AND DON'T**
   9. **CASE STUDY**
   10. **RELATED NEWS REPORT**

11. CONCLUSION

1. Flash floods are recurring phenomenon in India. Every years hundreds of people lose their life and public and private property worth billion of rupees are destroyed. Flash floods are not confined to urban areas, there are incidents of flash floods in rivers as well. Explain in detail causes of flash floods, areas prone to flash flood, preventive measures and life saving measures during flash floods.

OR

2. Wild fire is an emerging natural disaster . Wild fire incidences are increasing because of global rise in the temperature of the earth's surface because of global warming. There are both natural and human causes of wild fire. Wildfire causes huge loss to the flora and fauna of the region and in some cases few species are permanently lost. Explain in detail causes of wild fire , areas prone to wild fire, preventive measures and life saving measures during wild fire.

OR

3. Choose **any one** natural or any one man made disaster and explain in detail its causes, areas prone to that disaster, preventive measures and life saving measures that can during that disaster.

Map Exercise

3. MAKE A SEPRATE MAP COPY AND DO FOLLOWING

CH-1 HISTORY

On an outline **POLITICAL MAP OF FRANCE** locate the following places-

a) Bordeaux

b) Nantes

c) Paris

d) Marseilles

CH-1 GEOGRAPHY

On an outline **POLITICAL MAP** of India locate the following-

a) India states with capitals

b) Colour the states through which Tropic of cancer passes

c) Standard Meridian (Location and labeling)

CH-2 GEOGRAPHY

On an outline **PHYSICAL MAP** of India locate the following-

a) Mountain ranges- The karakoram, The Zasker, The Shivalik, The Aravali, The Vindhyas, The satpura, western and eastern Ghats.

b) Mountain Peaks- K2, Kanchan Junga, Anai Mudi.

c) Plateau- Deccan plateau , Chotta Nagpur plateau , Malwa Plateau.

d) Coastal Plains – Konkan , Malabar, Coromandal & Northern Circar.

NOTE (activity)

THE DISTRIBUTION OF MARKS OVER DIFFERENT ASPECTS RELATING TO WORK

S. No.	Aspects	Marks
A	Content accuracy, originality and analysis	**2**
B	Presentation and creativity	**2**
C	Punctuality	**1**

BY SST TEACHER
DINESH LATA

INFORMATION TECHNOLOGY

HOLIDAY HOME WORK

CLASS IX (Data Entry and Keyboarding Skills)

Follow the instructions given below while writing your assignment:

1. Assignment is survey based, that means you can find the functions and appearance of the keys on the internet, understand its working and write down in your own words.

2. After Explaining the use of keys handmade images of the keys should be drawn.

3. Work should be neat and clean.

Explain the use of the following keys on your computer keyboard and name the keys associated with the group: (You can take the help from the internet to define the use of keys)

Draw and label the images of the particular keys also.

1. Alphanumeric Keys

2. Punctuation Keys

3. Alt key

4. Arrow keys

5. Shift or Alt Keys

6. Backspace Key

7. Caps lock Key

8. Ctrl Key

9. Delete Key

10. Enter key or Return Key

11. Esc Key

12. Function Keys

13. Numeric Keyboard

HOLIDAY HOME WORK (PHYSICAL ACTIVITY TRAINER)

2024-2025

Students are instructed to the complete the following Holiday Home Work during Summer Break**:**

NOTE: DO IN A PROJECT FILE

CLASS: IX

1. Differentiate between
   1. Physical activity and Physical education
   2. Fine and Gross Motor
   3. Cognitive and affective domain

2. Plan 5 Physical Activities.

3. Prepare a project file of one Game/sport of your choice.

ARMY PUBLIC SCHOOL MEERUT CANTT

SUMMER HOLIDAY HOMEWORK

SESSION 2024-2025

CLASS IX – DATA SCIENCE (419)

Q1. In this project, you can use a data set of popular dog breed characteristics to help determine the best type of dog for some hypothetical friend of yours. You can consider various factors like the dog's lifespan, maximum weight, and whether the breed is good with children. You will collect, summarize, and compare data on finding the perfect dog breed.

(a) Prepare the column chart in your class notebook for the following variables-

- **dog's breed name and lifespan.**

(b) Write down the data in tabular form taking- breed name, lifespan, weight, colour, breed is good with children (yes/no) as variables.
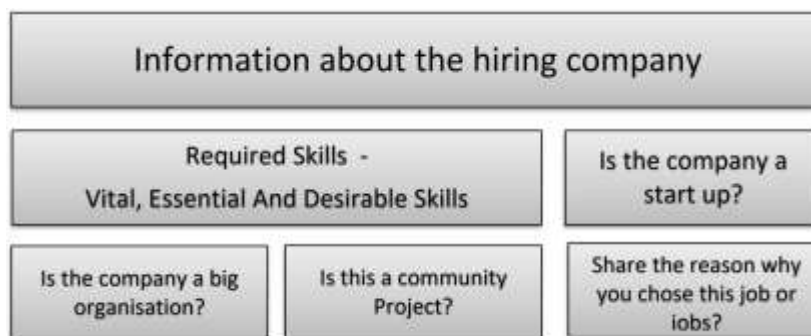
For e.g

Breed Name	Life Span	Weight	Colour	Breed is good with children (Yes/No)

Holiday Homework
Artificial Intelligence (Code: 417)
Class IX (2024-25)

1.) Job Advertisement for 2030: Make a Future Job Advertisement on A4 or A3 sized sheet and paste it in your classwork notebook. Mention what job are you recruiting for and what skill-sets do you expect in the candidate. Make a poster on A4 or A3 sized sheet with as much creativity as possible. It should be futuristic and should talkabout the period 10 years in the future.
Hint:

- Search for current and emerging trends in employment to make a Future Job Advertisement.
- The job description is for a job which will exist ten years from now, i.e., thecurrent date.
- To help you, the job advertisement must include the following information.

2.) Design a layout for your dream AI-enabled smart home on an A4-sized drawing sheet. Make sure to include gadgets and devices that enhance its uniqueness andintelligence.

3.) Experiment with the following AI based online open-source tools:
   a. Link for Game 1 (Rock, Paper and Scissors): https://rockpaperscissors-ai.vercel.app/
   b. Link for Game 2 (Semantris): https://research.google.com/semantris/
   c. Link for Game 3 (Emoji Scavenger Hunt): https://emojiscavengerhunt.withgoogle.com/
   d. Link for online climate tool: https://artsexperiments.withgoogle.com/impactfilter/After checking the above links, answer the following questions in your classwork notebook:

Ques1: Write three things you learnt from the tool used above.Ques 2: How do you think the above tools are AI enabled?

Ques 3: Did you face any difficulty while playing rock, paper, scissors and semantris?Ques 4: List the winning strategy for the three games mentioned above

IX MARKETING & SALES

2024-25

HOLIDAY HOMEWORK

Project to be prepared on following topics: (Any two)

1. Students shall prepare a file having a collection of different-Companies with their products. They should further classify the products and identify the marketing Concept/Philosophy used by the company to be in the market.
2. Assume yourself as a marketer who sells products. Why is it important to understand the buyer's behavior? Create a project understanding buyer behavior and its implications in selling products.
3. You are a salesman, make a handy file to understand basic sales tasks, money collection, sales reporting for a firm or multiple firms. Categorize the various selling activities and mention the types of selling used along with the selling tasks undertaken.
4. Create a project by collecting different products available in the market of different industries like FMCG Hospitality, Automobile etc. and how are they approaching different customers for different purposes of selling and marketing. Develop analysis, based on collected data.
5. Collection of Name of different-Companies with their products. Classify their products and identify the marketing Concept/Philosophy used by the company to be in the market. Product Customer Price Philosophies / Concept.

Note: Practical File - Students to make a power point presentation / assignment / practical file / report.

SUMMER HOLIDAY HOME WORK OF MATHEMATICS FOR IX

NUMBER SYSTEM AND POLYNOMIALS

1. If $3x + 2y = 12$ and $xy = 6$, find the value of $9x^2 + 4y^2$.

2. Write the following cubes in the expanded form:
   (i) $(3a + 4b)^3$

   (ii) $(5p - 3q)^3$

3. If $x^2 + 1/x^2 = 27$, find the values of each of the following:
   (i) $x + 1/x$

   (ii) $x - 1/x^2$

4. If $x - \dfrac{1}{x} = 4$ then evaluate $x^2 + 1/x^2$

5. If $a + b + c = 15$ and $a^2 + b^2 + c^2 = 83$, find the value of $a^3 + b^3 + c^3 - 3abc$.

6. Factorize:
   (i) $6ab - b^2 + 12ac - 2bc$
   (ii) $9(2a - b)^2 - 4(2a - b) - 13$

7. If $x^3 + ax^2 - bx + 10$ is divisible by $x^2 - 3x + 2$, find the values of a and b.

8. Using factor theorem, factorize each of the following polynomials:
   (i) $x^3 - 6x^2 + 3x + 10$
   (ii) $2y^3 - 5y^2 - 19y + 42$

9. Which one is not a polynomial

(a) $4x^2 + 2x - 1$

(b) $x^3 - 1$
(c) $y^2 + 5y + 1$

11. Find the number of zeros of $x^2 + 4x + 2$.

12. Find the value of k, if (x – 1) is a factor of $4x^3 + 3x^2 - 4x + k$.

14. If $x = \dfrac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ and $y = \dfrac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$, find the value of $x^2 + y^2 + xy$.

If $x = \dfrac{2-\sqrt{5}}{2+\sqrt{5}}$ and $y = \dfrac{2+\sqrt{5}}{2-\sqrt{5}}$, find the value of $x^2 - y^2$.

15. Determine rational numbers p and q if
$$\dfrac{7+\sqrt{5}}{7-\sqrt{5}} - \dfrac{7-\sqrt{5}}{7+\sqrt{5}} = p - 7\sqrt{5}\, q.$$

16. Simplify: $\dfrac{\overline{}}{\sqrt{6}-\sqrt{3}} + \dfrac{\overline{}}{\sqrt{6}+2} - \dfrac{\overline{}}{\sqrt{6}-\sqrt{2}}$

17. Show that: $\dfrac{1}{3-\sqrt{8}} - \dfrac{1}{\sqrt{8}-\sqrt{7}} + \dfrac{1}{\sqrt{7}-\sqrt{6}} - \dfrac{1}{\sqrt{6}-\sqrt{5}} + \dfrac{1}{\sqrt{5}-2} = 5$

18. If: $x = \dfrac{\sqrt{p+q}+\sqrt{p-q}}{\sqrt{p+q}-\sqrt{p-q}}$, then find the value of $qx^2 - 2px + q$.

19. If x = 2 and x = 0 are zeroes of the polynomial $2x^3 - 5x^2 + px + b$, then find the value of p and b.

20. Simplify and factorise $(a + b + c)^2 - (a - b - c)^2 + 4b^2 - 4c^2$.

COORDINATE GEOMETRY

1.. Name the quadrants in which following points (3,0) and (-9,-3).

2. Determine the graph of the equation y = 2x-3

3. Draw the graph of y = 4x. From the graph find the value y when x = -2

4. Draw the graph of x -10 = 0. what type of graph is it?

5. Draw the graph of y = -x

6. The points (-2,5) and (3,-5) are plotted in xy planes. Find the slope and y intercept of the line joining the points.

7. Draw the graph of equation 3x + 6y = 12. Find the coordinates of the point where the graph cuts the y-axis.

8. How does the graph of y = mx, depends on the value of m. Also draw graph when m = 2,3

9. In which quadrant will these points (3,-5), (-3,-1)

10. Determine the slope and y-intercept of line 2x+3y+7 = 0

LINEAR EQUATIONS IN TWO VARIABLES

1. Show that x = 1, y = 3 satisfy the linear equation 3x − 4y + 9 = 0.

2. Is (3, 2) a solution of x + y = 6?

3. Is $\left(2\frac{8}{3}\right)$ a solution of 2x + 3y = 12?

4. (i) Write the equation of x-axis.

(ii) Write the equation of y-axis.

5. Express $-2x+\frac{3}{2}y-4=0$ in the form of ax + by + c = 0 and write the value of a, b and c.

6. Express 2x = 5 in the form ax + by + c = 0 and find the value of a, b and c.

7. Write two solutions of 3x + y = 8.

8. If x = −1 and y = 2 is a solution of kx + 3y = 7, find the value k.

Note: You have to make separate note book, containing enough pages for doing this work.

PROJECT: Arunachal Pradesh and Meghalaya are the states of India which are prone to flash floods, cloud bursts, forest fires, high winds including earthquakes. You can opt any one of these disasters and suggest disaster risk reduction ideas using any topic of Mathematics. You can depict through PPT presentation, Chart, Models etc.