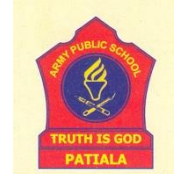


**ARMY PUBLIC SCHOOL, PATIALA
HOLIDAYS HOMEWORK
CLASS - IX (2024-25)**



SUBJECT - ENGLISH

1. AIL PROJECT:

Compare and contrast the states KARNATAKA and LADAKH in terms of:

- (i) English Authors
- (ii) Music
- (iii) Culture and Traditions
- (iv) Dance Forms

Support your points with suitable pictorials (pictures/ collage). Submit your project in a scrap file/ as Power point presentation. Keep it high on aesthetic and artistic sense.

2. WORK BOOK:

Do chapter I, II, III, IV from workbook (Words and Expressions- I).

3. WRITING (AESTHETIC AND INFORMATIVE):

Make Posters on the following topics:

- a) Mental health and well being
- b) Save the planet, go sustainable

4. READING AND REVIEW:

Read any good book and present a review on it in a video recording of 2-3 minutes. Make sure that you should be in school uniform while getting yourself recorded.

5. REVISION:

Revise all the topics that have been done till now and polish your skills for better performance in academics as well as co-curricular activities.

SUBJECT - HINDI

1. अनुच्छेद लेखन

मेरी कर्नाटक यात्रा

संकेत बिंदु :- कर्नाटक का पर्यावरण , लोगों का रहन-सहन , लोगों का कारोबार

2. पत्र लेखन-

अपने मित्र को अपनी लद्दाख की यात्रा के बारे में बताते हुए पत्र लिखें।

3. संवाद लेखन -

दादा और पोते के बीच कर्नाटक के त्योहारों को लेकर हुई बातचीत को संवाद के रूप में लिखें।

4. चित्र वर्णन-

नीचे दिया गया चित्र कर्नाटक के प्रसिद्ध त्योहार से संबंधित है , इस चित्र को देखकर अपने विचार लिखिए।



5. कार्यकलाप -

कला एकीकृत परियोजना (ART INTEGRATED PROJECT) (कोई एक गतिविधि)

1. कर्नाटक के प्रसिद्ध मंदिरों के चित्र एकत्रित करके उनकी जानकारी प्राप्त करें। इस जानकारी को पी .पी. टी , कोलाज या भित्ति पत्रिका (कोई एक) में संकलित करें।

2. लद्दाख के प्रसिद्ध बौद्ध मठों के चित्र एकत्रित करके उनकी जानकारी प्राप्त करें। इस जानकारी को पी .पी. टी , कोलाज या भित्ति पत्रिका (कोई एक) में संकलित करें।

SUBJECT - MATHS

NOTE : Do the following questions in a separate notebook.

1. Find decimal expansion of $\frac{3}{15}$ and $\frac{50}{3}$.
2. Find four rational numbers between $\frac{2}{9}$ and $\frac{3}{7}$.
3. Express $18.\overline{48}$ in the form of $\frac{p}{q}$, $q \neq 0$.
4. Simplify : $\frac{\sqrt{5} + \sqrt{3}}{\sqrt{80} + \sqrt{48} - \sqrt{45} - \sqrt{27}}$.
5. Find the value of : $[1^3 + 2^3 + 3^3 + 8^2]^{-5/2}$.

6. Find 'm', if $2^{m-7} \times 5^{m-4} = 1250$.

7. If $\frac{3-\sqrt{5}}{3+2\sqrt{5}} = a\sqrt{5} - \frac{19}{11}b$, find the values of a and b .

8. If $y = -1$ is a zero of the polynomial $q(y) = 4y^3 + ky^2 - y - 1$, then find the value of k .

9. If $x + \frac{1}{x} = 5$, find the value of $x^3 + \frac{1}{x^3}$.

10. If $a + b + c = 9$ and $ab + bc + ca = 26$, find $a^2 + b^2 + c^2$.

11. Check whether a polynomial $p(x) = x^4 - 2x^3 + 3x^2 - x + 1$ is divisible by $x - 1$ and $x + 1$ or not.

12. Factorise : (a) $x^3 - 10x^2 - 53x - 42$

(b) $2y^3 - 5y^2 - 19y + 42$

13. Using suitable identities, factorise :

(a) $4x^2 + 25y^2 + 9z^2 - 20xy - 30yz + 12zx$

(b) $9x^2 + 24xy + 16y^2$.

14. Find the value of the polynomial $7x^4 + 3x^2 - 4$, when $x = -2$.

15. Find the value of 'k' for which the polynomial $x^3 + 3x^2 - 3x + k$ has -3 as its zero.

Activities : (To be done in practical file)

1. Draw square root spiral.

2. Represent the factors of a quadratic polynomial by cutting and pasting.

Project: Make a working model of square root spiral.

Do the art-integrated activity in scrap book

SUBJECT –SCIENCE

1. Prepare Art Integrated file for Science

States: Karnataka and Ladakh

Topic: Animal Husbandary

Children are advised to make any of the following:

PPT, Collage, photography, ClayModelling, Brochure, Sketches

2. Write the following practicals in practical file

a) Preparation of:

a) a true solution of common salt, sugar and alum

b) a suspension of soil, chalk powder and fine sand in water

c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of

• transparency

• filtration criterion

• stability

b)Preparation of a) A mixture b) A compound using iron filings and sulphur powder and distinguishing between these on the basis of:

- (i) appearance, i.e., homogeneity and heterogeneity
- (ii) behaviour towards a magnet
- (iii) behaviour towards carbon disulphide as a solvent
- (iv) effect of heat

c)Perform the following reactions and classify them as physical or chemical changes:

- i) Iron with copper sulphate solution in water
- ii) Burning of magnesium ribbon in air
- iii) Zinc with dilute sulphuric acid
- iv) Heating of copper sulphate crystals
- v) Sodium sulphate with barium chloride in the form of their solutions in water

d)Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labeled diagrams.

e) Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams.

f) Determination of the melting point of ice and the boiling point of water.

3. Solve the following worksheet in the class work notebook .

1) With proper explanation ,explain whether the following statements are true or false?

- i) Sublimation occurs only when the solid is heated.
- ii) A lighter gas can move downwards and a heavier gas can move upwards.
- iii) Interconversion of matter is a constant temperature process.

2) What is evaporation? In what way it is different from boiling?

3) What do you understand by diffusion? Give one example.

4) A punctured tyre becomes flat more rapidly in summer than in winter. Explain.

5)What is dry ice? How it is prepared?

6) A solution contains 5ml of Alcohol in 70 ml of water. Calculate the Volume by Volume percentage of of the solution.

7)2.5 g of a solute are dissolved in 25gm of water to form a saturated solution at 298 K.Find out the solubility of the solute at this temperature.

8) Explain why particles of a colloidal solution do not settle down when left undisturbed, while in the case of a suspension they do?

9) Smoke and fog both are aerosols. In what way are they different?

10) The 'sea water' can be classified as a homogeneous as well as heterogeneous mixture. Comment.

11) A person goes to market, makes purchases and come back at a constant slower speed. Draw displacement and velocity time graph of the person.

12) A cyclist moving on a circular track of radius 50 m completes one revolution in 4 minutes. What is his (i) Average speed (ii) Average velocity in one full revolution?

13) a) A body starting from rest moves with a constant acceleration of 5m/s^2 . What is velocity of the body after 10 sec?

b) A scooter moving with a velocity of 18km/h is brought to rest in 5 sec by applying brakes. What is the retardation produced?

14) A ball thrown vertically upward return to the thrower in 20 second. Calculate the velocity with which it was thrown and the maximum height attained by the ball. Take $g= 10\text{m/s}^2$.

15) Calculate the speed of tip of minute hand of a clock, whose length is 7 cm.

SUBJECT –SOCIAL STUDIES

☞ Social Science Art Integrated Project

Make any of the following on the topic

Climate and Natural Vegetation of Karnataka and Ladakh

- PPT
- COLLAGE
- BROCHURE
- SKETCHES
- Project File

SUBJECT – PUNJABI

ਪ੍ਰਦੂਸ਼ਣ ਅਤੇ ਮੋਬਾਈਲ ਦੇ ਲਾਭ ਤੇ ਹਾਨੀਆਂ(ਲੇਖ)
ਅ ਤੋਂ ਸ਼ੁਰੂ ਹੋਣ ਵਾਲੇ 30 ਮੁਹਾਵਰੇ ਲਿਖੋ।

SUBJECT – ARTIFICIAL INTELLIGENCE

Vacation assignment

Make a poster or ppt on any one of the following topics:-

1. Application of AI in gaming
2. Application of AI in searching
3. Application of AI in voice identification
4. Application of AI in safety

SUBJECT – INFORMATION TECHNOLOGY

Make a chart, or ppt (15 slides or practical file

1. Application of IT in field of education
2. Application of IT in field of banking
3. Application of IT in field of entertainment
4. Application of IT in field of medical and health care

SUBJECT – ART

Make 2 Paintings Depicting The Scenic Beauty Of Karnataka And Ladakh