

DAV PUBLIC SCHOOL, KOYLA NAGAR, DHANBAD

SUMMER HOLIDAY HOMEWORK

CLASS:10

SUBJECT: ENGLISH

- Q1. Prepare 2 Factual Descriptions (Person/Object)
- Q2. Prepare 2 Formal Letters on social issues
- Q3. Prepare short Bio-Sketches of William Shakespeare and Vikram Seth (with their pictures) along with the central ideas of 'Not Marble nor The Gilded Monuments' and 'The Frog and The Nightingale' in about 100-120 words.
- Q4. Prepare articles on the topics 'Impacts of Social Media on Students' and 'Where There is a Will, There is a Way' in about 120-150 Words.

विषय (हिंदी) (202)

1. पाठ्यक्रम की कोई भी एक कविता याद करके तथा उसे सुन्दर अक्षर में लिखिए।
2. 'पर्यावरण संरक्षण' पर या अपने द्वारा बनाई गई 'पहाड़ी चॉकलेट' पर विज्ञापन तैयार करें।
3. सूर के पद अथवा राम- लक्ष्मण-परशुराम संवाद पाठ का भावार्थ एवं शब्दार्थ लिखिए।
4. 'भाग्य और पुरुषार्थ' अथवा 'स्वतंत्रता का अमृत महोत्सव' में से किसी एक विषय पर अनुच्छेद लिखिए।
5. निम्नलिखित में से कोई दो फ़िल्में देखिए और उनसे मिलनेवाली पाँच प्रमुख शिक्षाएँ लिखिए :-

i:- Lam Kalam

ii :- Chalk n duster

iii :- Taare zameen par

6. पोर्टफोलियो बनाएँ। (A4 साइज़ पेपर में)
7. गुजरात, महाराष्ट्र, झारखण्ड, बिहार उत्तराखंड के किन्हीं दस स्वतंत्रता संग्राम सेनानियों की परियोजना फ़ाइल बनाएँ, जिसमें इन सेनानियों की फोटो, नाम, जन्म-मृत्यु तिथि, महत्त्वपूर्ण कार्य / स्वतंत्रता प्राप्ति हेतु सहयोग आदि का वर्णन हो। (A4 साइज़ पेपर में)।

विषय:- संस्कृतम्(119)

पठनम्, प्रश्नानाम् समाधानम्,

समग्रलेखनकार्यम्

1.अपठितगद्यांश-3

2.पत्रलेखनम् -3

3.चित्राधारित-वर्णनम्- 3

4.अपठित-कथापूर्ति:- 3

SUBJECT: MATHEMATICS

1. The numbers 525 and 3000 are both divisible by 3, 5, 15, 25 and 75. What is the HCF (525, 3000)? Justify your answer.
2. Prove that $\sqrt{7} + \sqrt{5}$ is irrational.
3. Show that 12^n cannot end with the digit 0 for any natural number n.

4. The length, breadth and height of a room are 8 m 25 cm, 6 m 75 cm and 4 m 50 cm respectively.

Determine the largest rod which can measure the three dimensions of the room exactly.

5. If the polynomial $x^4 - 6x^3 + 16x^2 - 25x + 10$ is divided by another polynomial $x^2 - 2x + k$, the remainder comes out to be $x + a$. Find k and a .

6. For which values of a and b , are the zeroes of $q(x) = x^3 + 2x^2 + a$ also the zeroes of the polynomial $p(x) = x^5 - x^4 - 4x^3 + 3x^2 + 3x + b$? Which zeroes of $p(x)$ are not the zeroes of $q(x)$?

7. If α, β are the two zeroes of the polynomial

$$f(t) = t^2 - p(t + 1) - c,$$

show that $(\alpha + 1)(\beta + 1) = 1 - c$.

8. Find a quadratic polynomial whose zeroes are:

$$(5 + \sqrt{2})/(5 - \sqrt{2}), (5 - \sqrt{2})/(5 + \sqrt{2})$$

9. Solve the following pair of linear equations by elimination method and substitution method:

$$x/2 + 2y/3 = -1$$

$$x - y/3 = 3$$

10. Draw the graph of:

$$x - y - 1 = 0$$

$$2x + 3y - 12 = 0$$

Also find the coordinates of the vertices of the triangle formed by the two straight lines on the y-axis and also determine the area of triangle.

11. A and B are friends and their ages differ by 2 years. A's father D is twice as old as A and B is twice as old as his sister C. The age of D and C differ by 40 years. Find the ages of A and B.

12. A boat covers 32 km upstream and 36 km downstream in 7 hours. Also, it covers 40 km upstream and 48 km downstream in 9 hours. Find the speed of the boat in still water and that of the stream.

13. A lab assistant has a solution of 50% acid and the other one having 25% acid. How much of each should be mixed to make 10 litres of 40% acid solution?

14. Vijay had some sweets. He divided them into two lots A and B. He sold the first lot at the rate of 2 for 3 sweets and the second lot at 1 per sweet and thus received a total of 400. Had he sold the first lot at the rate of 1 per sweet and the second lot at 4 for 5 sweets, his total collection would have been 460. Find the total number of sweets he had.

15. Solve:

$$2/\sqrt{x} + 3/\sqrt{y} = 2$$

$$4/\sqrt{x} - 9/\sqrt{y} = -1, \quad x, y > 0$$

SUB: BIOLOGY

Choose Any TWO Activities

1. Poster Making: Make a colourful poster on:

“Healthy Digestive System”

OR “Save Your Heart”

2. Model Making: Make any one model:

Human heart, Lungs, Digestive system

Use clay, cardboard, or waste materials.

Thread art for blood vessels

3. Comic Strip Activity

Create a comic where:

Heart talks to lungs

Food travels through digestive system

Blood cells explain their functions

FINAL PRESENTATION IDEAS

Use coloured sheets for each topic

Add 3D labels

Use movable arrows and rotating wheels

Add small LED lights for “oxygen flow”

Use recycled materials for eco-friendly presentation

SUBJECT: CHEMISTRY

Que. No. 1. What is observed when ferrous sulphate crystals are heated in a test tube?

Que. No. 2. A metal nitrate 'A' on heating gives a yellow residue along with the evolution of a brown gas 'B' and a colorless gas 'C'. Aqueous solution of 'A' on reaction with potassium iodide forms a yellow precipitate of compound 'D'. Identify 'A', 'B', 'C' and 'D'. Write chemical equations also.

Que. No. 3. Write oxidized substance, reduced substance, oxidizing agent and reducing agent.

Que. No. 4. Prepare a working model for “Electrolysis of water”.

Que. No. 5. Write the pH value of:

Lemon juice, HCl acid, soft drinks, Human blood, Human saliva, Lime water, Urine, Milk, NaOH, Water

Que. No. 6. While diluting an acid why is it recommended that the acid should be added to water and not water to the acid?

SUBJECT: PHYSICS

1. Solve NCERT question of chapter: light
2. Do previous year CBSE board questions of light from 2022-26.

NOTE: Do it in separate copy.

Subject : History/civics

1. What would have been the condition of France and Europe, if the French Revolution would not have taken place. Write about the social political conditions that may have prevailed.
2. Trace the Origin of Habsburg empire. Give historical Account of Habsburg Empire in Europe
3. If you were responsible to make the power sharing arrangement in Belgium what other features you would have liked to add or remove from the elements of Belgium model of power sharing
4. Try to find out the allegories of any five countries other than France and Germany and Write their attributes

Work is to be done in project file paper

No files required. It must be hand written. Students can use illustrations and maps

Subject : Geography

Prepare a note on "SOIL AS A RESOURCE", "TYPES OF SOIL", "CONSERVATION OF SOIL", AND "TYPES OF SOIL EROSION"

Do it in classwork notebook/ copy.

Subject: Economics

Activity on Sustainable Development

"Save Environment, Save Future"

Aim: To create awareness about sustainable development among students.

Materials Required: Chart paper, Color pens, Pictures related to environment, Glue and scissors

Subject: IT/A. I (Employability Skills) (Part A)

Unit 1: Communication Skills - II

1. Briefly explain the 7 Cs of Communication (Clear, Concise, Concrete, Correct, Coherent, Complete, and Courteous) and why "Courteous" is vital in a digital workplace.
2. Identify and explain one Physical Barrier and one Language Barrier that might prevent effective communication in a classroom.

Unit 2: Self-Management Skills - II

3. Define Stress Management. List any three healthy techniques a student can use to manage exam-related stress.
4. Self-Reflection: List three "Stressors" you face during exam season and provide one healthy coping mechanism for each.
5. SMART Goals: Create a SMART (Specific, Measurable, Achievable, Realistic, Time-bound) goal for your upcoming IT/AI Board Practical exams.

Unit 3: ICT Skills - II

6. What is an Operating System? Name one open-source and one proprietary operating system commonly used today.
7. Digital Security & Maintenance
8. Practical Exercise: Perform a "Disk Cleanup" or "Defragmentation" (if using HDD) on your home computer. Write down the steps you followed.
9. Security Research: Define the following terms and suggest one way to prevent them:
 - a. Phishing
 - b. Trojan Horse
 - c. Spyware