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**HOLIDAYS HOMEWORK CLASS 9**

**Subject- Science**

1. REVISE THE SYLLABUS DONE IN CLASS.
2. READ THE CHAPTER CELL, ALSO FORM ATLEAST 10 EXTRAQUESTIONS FROM THE CHAPTER AND ALSO WRITE THEIR ANSWERS.
3. MAKE A PROJECT FILE ON DIFFERENT TYPES OF ORGANELLES (at least 7) PRESENT IN A CELL. MAKE WELL LABELLED DIAGRAM OF EACH ORGANELLE AND WRITE ATLEAST 5 POINTS FOR EACH.
4. DO THE GIVEN ASSIGNMENT.

**ASSIGNMENT(SCIENCE)**

1. Explain how gases can be liquefied?
2. A drop of dettol got evenly distributed in water. Which phenomenon is involved here? 1
3. Liquid nitrogen is used as a commercial refrigerant to flash freeze foods. Nitrogen boils at -196°C. What is this temperature on the Kelvin temperature scale?
4. Which of the following has the highest kinetic energy?

 (a) Particle of ice at 00C

(b) Particle of water at 00C

 (c) Particle of ice at1000C

 (d) Particle of steam at1000C

5. Which of the following does not affect rate of evaporation?

 (a) Wind speed

(b) Surface area

(c) Temperature

 (d) Insoluble heavy impurities

 6. Bose-Einstein Condensate have

(a) Very low kinetic energy

 (b) Low kinetic energy

(c) High kinetic energy

 (d) Highest kinetic energy.

7.In which of the following conditions, the distance between the molecules of hydrogen gas would increase?

 (i) Increasing pressure on hydrogen contained in a closed container

 (ii) Some hydrogen gas leaking out of the container

(iii) Increasing the volume of the container of hydrogen gas

(iv) Adding more hydrogen gas to the container without increasing the volume of the container

(a) (i) and (iii) (b) (i) and (iv) (c) (ii) and (iii) (d) (ii) and (iv)

 8. In a hot summer day,Priyanshu and Soham are wearing cotton and nylon clothes respectively. Whom do you think would be more comfortable and why?

9. Name the physical state of matter which can flow but cannot fill the vessels completely.

 10. Which phenomenon occurs during the following changes?

 i. Wax melts in the sun.

ii. Drying of wet clothes

iii. Formation of clouds

11.Differentiate the three states of matter on the basis of

 a. Density b. Volume c. Compressibility

12. What is evaporation ?In what way it is different from boiling? What is the effect of humidity on the rate of evaporation? Define Latent heat of fusion? Why does steam cause more severe burning as compared to boiling water at 1000C ?

13. Explain why? i. A gas fills a vessel completely. ii. Camphor disappears without leaving any residue. iii. The temperature does not rise during the process of melting and boiling, though heat energy is constantly supplied. iv. Water stored in an earthen vessel becomes cool. v. An iron almirah is a solid at room temperature.

**Subject- English**

1. Write 2 types of letter i.e letter of complain and letter to editor
2.Write biography of writer William Shakespeare and Robert Frost
3. Write any 10 literary devices with examples and definition ( based on 9th and 10th class)
4. Write the message given by the poem "road not taken" (100 words)
5.Write about culture, food, dance, dress of odisha (on A4 sheet ) maximum 8 sheets

**Subject- Maths**

1. Complete chapter 2 and write in your notebook.
2. Write a write-up /project on any one mathematician from internet or any book about 5 pages.
3. Simplify (x+y+z)2 – (x+y-z)2
4. Factorize 9x2+y2+z2 -6xy+2y-6zx
5. Simplify $12\sqrt{18}-6\sqrt{20}$-$3\sqrt{50}+8\sqrt{45}$
6. If x=$\sqrt{3}$-2 find the value of $(x+ \frac{1}{x})^{3}$
7. If x= 2+$\sqrt{5}$ find the value of $(x^{2}-\frac{1}{x^{2}}$)
8. Represent $\sqrt{4.2}$ on number line
9. Show that $(x^{a-b})^{a+b}.(x^{b-c})^{b+c}.\left(x^{c-a}\right)^{c+a}=1$
10. If $\frac{5-\sqrt{3}}{5+\sqrt{3}}=a+b\sqrt{3}$ find a and b.
11. Evaluate using identity (999)3
12. Find the value of x3+y3-12xy+64 when X+Y= -- 4 .
13. If the polynomial P(x) = x4-2x2+3x2-9x+8 is divided by (x-2), it leaves a remainder 10 , find “a”.
14. The polynomial Kx3 +3x2-8 and 3x3-5x+k are divided by x+2. If the remainder in each case is the same , find the value of k.

(15) Simplify the following: (a) (√5 − 4√7)(√7 + 3√5) (b) (√11 − 4)(√2 + 3)

 (c) (6√5 − 2√3)(3√5 − 2√5) (d) (11√2 + √2)(√2 + 3√2)

(16) Find the value of p and q if

$$\frac{7-\sqrt{3}}{7+\sqrt{3}}+\frac{7+\sqrt{3}}{7-\sqrt{3}}=p-q\sqrt{3}$$

**विषय - हिंदी**

निर्देश - सभी विद्यार्थी यह कार्य ग्रीष्मावकाश में करेंगे । 1.किसान के जीवन पर एक अनुच्छेद लिखिए ।2.अपने किसी एक यात्रा का संक्षिप्त वर्णन कीजिए।3. कबीर दास के 10 दोहे लिखे और याद कीजिए4. किसी एक स्वतंत्रता सेनानी का सचित्र वर्णन कीजिए।(प्रश्न 1 से 4 तक का कार्य हिंदी की कार्यपुस्तिका में ही किया जाए ) 5.परियोजना कार्य कला एकीकृत परियोजना

1.उड़ीसा की सांस्कृतिक विशेषताओं पर अनुच्छेद लिखिए ।2.उड़ीसा की भाषा,कवियों,लेखकों, वेशभूषा, खानपान, दर्शनीय स्थल, नृत्य शैलियों तथा रीति-रिवाजों की सचित्र जानकारी एकत्र कीजिए ।( यह परियोजना A4 पर अलग से फाइल में किया जाए )

**Subject- Social Science**

1. WRITE AND LEARN THE ANSWER OF THE FOLLOWING  QUESTIONS
	1. Discuss the causes of the French revolution of 1789
	2. How was the French society organised? What privileges did certain sections of the society enjoy ? Describe.
	3. Why do we need a standard meridian for India?
	4. What is the significance of India’s location?
	5. Explain the measure features of democracy.
	6. Why do we prefer democracy better than any other form of the government?
	7. What are the different ways of increasing production in the same piece of land ?
	8. What are the various requirements of production?

ACTIVITY AND MAP WORK

1. 1. Start writing diary. Before sleeping write about what you did the whole day.
2. Project 1- Make a project file on Disaster management with reference to the book’‘Together, Towards a Safer India - Part II, a textbook on Disaster Management for Class IX - Published by CBSE .(Do it in preferably A4 Size paper.)10 to 15 pages

2.Project work 2- Make art integrated project on anyone of the following topics (pages 15 to 20)

First introduction of the odisha State and map

1. Great personalities of the odisha state.
2. Famous historical place, monuments,forts and caves
3. Culture of odisha state food, costume, language, religious centre and literature

3.Project work 3- Make interdisciplinary project on the following topics :-I) forest society and colonialism

Ii) Natural vegetation and wildlife

4. In a Political map of India show the following things.(Do it in suitable map and paste or pin it in homework copy)

1. India-States with Capitals
2. Tropic of Cancer
3. Standard Meridian
4. Map given in cbse curriculum of chapter French revolution and India size and location

5 Select a democratic and non-democratic country and compare with the help of following key points

Nature of administration, economic conditions, political stability 6. Try to visit any physical geographical features, like- waterfall, mountain, plateau, river etc. and make notes on-a. Geographical history, b. Its importance,c. What have changed over time?

7. Select any one physical features of India and describe it.

8. During your field visit talk to some farmers of your region. Find out:1. What kind of farming methods — modern or traditional or mixed — do the farmers use? Write a note.2. What are the sources of irrigation?3. How much of the cultivated land is irrigated? (Very little/nearly half/majority/all)4. From where do farmers obtain the inputs that they require?

**विषयः - संस्कृतम्**

१. प्रथम-पाठस्य केवलं पठनम्

२. द्वितीय-पाठस्य केवलं पठनम्

३. एकस्य संस्कृत-गीतस्य सस्वर-गायनम् /त्रयाणां श्लोकानां सस्वर-गायनम्

४. विभक्तिं योजयित्वा वाक्य-रचना

प्रथमा विभक्तिः - 20 वाक्यानि (लेखनम्)

द्वितीया विभक्तिः - 20 वाक्यानि (लेखनम्)

तृतीया विभक्तिः - 20 वाक्यानि (लेखनम्)

चतुर्थी विभक्तिः - 20 वाक्यानि (लेखनम्)

पञ्चमी विभक्तिः - 20 वाक्यानि (लेखनम्)

षष्ठी विभक्तिः - 20 वाक्यानि (लेखनम्)

सप्तमी विभक्तिः - 20 वाक्यानि (लेखनम्)

५. १ त: १०० पर्यन्तं सङ्ख्या स्मरणं लेखनं च

६. अव्ययपदानि योजयित्वा 50 वाक्य-रचना एवं अव्ययपदानां लेखनम्

७. सन्धि-कार्यम् (स्वर-सन्धि:, व्यञ्जन-सन्धि:, विसर्ग-सन्धिः) उदाहरण-सहितं लेखनम्

८. उच्चारण-स्थानानि (लेखनम्)

९. बालक,बालिका एवं फल शब्द-रूपाणि (30 वाक्य-रचना एवं शब्द-रूपाणि लेखनम्)

१०. प्रश्न-निर्माणम् (20 वाक्य-रचना अकारान्त पुँल्लिङ्गम्/आकारान्त स्त्रीलिङ्गम्)

११. 1 अपठित गद्यांश

१२. 1 पत्र-रचना

१३. 'गम्' धातु-रूप लेखनम् (पञ्च-लकारेषु)

१४. नवसृजनात्मक-परियोजना-कार्यम्

उपविषय: - प्राचीने भारते आयुर्वेद: विज्ञानं प्रौद्योगिकी च

(प्राचीन भारत में आयुर्वेद विज्ञान और प्रौद्योगिकी)

परियोजना कार्य करते समय वर्तमान से जोड़कर उस विषय को पढ़ते हुए अपना विचार भी प्रस्तुत करें कि भविष्य में क्या किया जा सकता है।

**Subject- AI**

* Answer the following questions on AI notebook:

1. Which programming language is used for AI ?

2. Give some real world applications of AI ?

3. Who developed AI ?

4. Write 20 shortcut keys related to computer.

5. Write the difference between Human being and computer ?

6. Revision

**ਵਿਸ਼ਾ- ਪੰਜਾਬੀ**

1. ਸਮਾਂ, ਵਿਸਾਖੀ ਦਾ ਮੇਲਾ- ਪੂਰਾ ਪਾਠ ਪੜ੍ਹੋ ਅਤੇ ਯਾਦ ਕਰੋ |
2. ਸਮਾਂ, ਵਿਸਾਖੀ ਦਾ ਮੇਲਾ- ਪ੍ਰਸ਼ਨ / ਉੱਤਰ ਯਾਦ ਕਰਕੇ ਕਾਪੀ ਤੇ ਲਿਖਣੇ ਹਨ |