

PRACTISE ASSIGNMENT-2024

CLASS – IX

Dear students,

You really need work hard to improve your writing skill. On regular days your daily routine is so tight that, you hardly get any time to work upon the areas where you need improvement. Holidays are the best period to enjoy, take rest as well as to do take efforts to remove weaknesses. These practice assignments have been designed carefully, so that you can utilise your time to get the best benefits.

Sr. Mistress

Bhabani Nande

GENERAL INSTRUCTION:-

- Date wise solve 10 sums of Maths in your class work copy every day
- At least 2 questions of Bio and 1 question of Physics and Chemistry to be written every day
- Social Science project is SEA and carries 5 marks and the last date to submit your project is 25/10/24
- One page in English, Hindi/ Sanskrit to be written in class work copies, with date

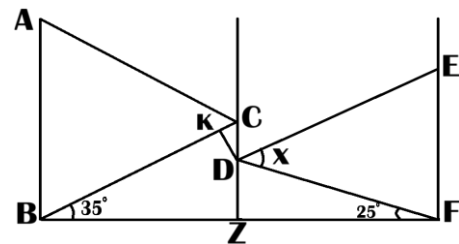
SUBJECT	
English	<p>1. The first test tube baby turtle (a) _____ born last month in California. The story began (b) _____ a broken turtle egg (c) _____ on the seashore. a) i. was born (ii) were born (iii) is born (iv) are born (b) (i) where (ii) which (iii) when (iv) who (c) (i) is find (ii) was found (iii) are finding (iv) found</p> <p>2. Lokesh/ Lavanya Sharma, in charge of the NSS Club of St. Andrew's School, Kashipur, is asked to write a notice about a fair being organised by the club to collect articles & money for people affected by floods in Uttaranchal. The notice will be put up for students on the school notice board. Write the notice in around 40 words, including relevant details such as purpose of fair; kind of stalls-games, food etc; contributions accepted; fair timing etc. In your notice so that students may contribute generously. Do not give extra information. Put the notice in a box.</p>

	<p>3. In the story 'How I taught my Grandmother' we see the narrator and her grandmother in which the latter requests her granddaughter to teach her how to read. Write an imaginary conversation between a grandfather and a grandson in which the former requests the young lad to teach him a new skill. (120 words)</p> <p>4. What kind of a person is Harold's father? Contrast his character to that of Percy. (120 words)</p> <p>5. Write a note on the importance of decision making skills with reference to 'The Road not Taken'. (120 words)</p> <p>6. Discuss Wordsworth's fondness for nature as is discussed in 'The Solitary Reaper'. (40-50 words)</p> <p>7. Discuss the significance of the title 'The Man who Knew Too Much'. (40-50 words)</p>
Hindi	<p>१. किसी एक विषय बिंदु पर १२० से १५० शब्दों में अनुच्छेद-लेखन कीजिए-</p> <p>(क) मेरी प्रार्थना सभा - *संकेत बिंदु* प्रत्येक विद्यार्थी के लिए मत्त्वपूर्ण , अनुशासित होना सीखना, प्रार्थना सभा का अंत राष्ट्रगान से होना।</p> <p>(ख) राष्ट्रभाषा हिंदी संकेत बिंदु : राष्ट्रभाषा का अभिप्राय , आवश्यकता, बाधाएं , विकास हेतु प्रयास ,हमारी पहचान।</p> <p>२. आप दिल्ली निवासी रचित/रचिता हैं। यात्रा करते समय आपके साथ किसी कर्मचारी ने अशिष्ट व्यवहार किया। इस संदर्भ में रेलवे अधिकारी को शिकायत करते हुए एक पत्र लिखिए</p> <p>३. अपने मोहल्ले की सफ़ाई की स्थिति को लेकर मित्र से हुए संवाद को लगभग 50 शब्दों में लिखिए।</p> <p>४. 'माता पिता भगवान का रूप' विषय पर आधारित लघुकथा लगभग 100 शब्दों में लिखिए।</p> <p>५. आप नीति/नैतिक हैं। विद्यालय में हिंदी पुस्तकालय को आधुनिक बनाने की आवश्यकता बताते हुए अपने प्राचार्य को लगभग 80 शब्दों में ई -मेल लिखिए।</p>
Sanskrit	<p>1. कांचित् पंच अपठितगद्यांशानाम् अभ्यासं उत्तरपुस्तिकायां कुर्वन्तु।</p> <p>2. कानिचित् पंचपत्राणाम् अभ्यासं उत्तरपुस्तिकायां कुर्वन्तु।</p> <p>3. कानिचित् पंचचित्राणाम् अभ्यासं उत्तरपुस्तिकायां कुर्वन्तु।</p>
Maths	<p>WORK SHEET</p> <p>Q. 1.</p> <p>Find the value of $\frac{(9)^{\frac{3}{2}} - 3 \times 5^0 - \left[\frac{1}{81}\right]^{-\frac{1}{2}}}{\left(\frac{64}{125}\right)^{-\frac{2}{3}} + \frac{1}{\left(\frac{256}{625}\right)^4} + \left(\frac{\sqrt{25}}{3\sqrt{64}}\right)}$.</p>

- Q. 2.** If $2^x = 4^y = 8^z$ and $\left(\frac{1}{2x} + \frac{1}{4y} + \frac{1}{6z}\right) = \frac{24}{7}$, then find the value of z .
- Q. 3.** If $\frac{4\sqrt{3}+5\sqrt{2}}{\sqrt{48}+\sqrt{18}} = \frac{a+b\sqrt{6}}{15}$ and $\left(\frac{a}{b}\right)^x \left(\frac{b}{a}\right)^{2x} = \frac{64}{729}$, then find x .
- Q. 4.** If $x^4 + \frac{1}{x^4} = 47$, find the value of $x^3 + \frac{1}{x^3}$.
- Q. 5.** Factorize: $\left[\frac{2}{x^4} - \frac{1}{x^2}\right]$.
- Q. 6.** If $(x + a)$ is the factor of the polynomials $x^2 + px + q$ and $x^2 + mx + n$, then find the value of ' a '.
- Q. 7.** Find the value of l , so that $(y - 2p)$ is a factor of $\left(\frac{y^3}{4p^2} - 2y + lp\right)$.
- Q. 8.** If $a - b = 3$, $a + b + x = 2$, then find the value of $(a - b)[x^3 + 3(a + b)x^2 + 3x(a + b)^2 + (a + b)^3]$.

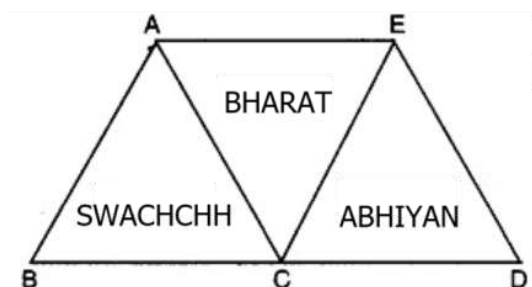
- Q. 9.** In the given figure, it is given that

- (i) $AB \perp BF$,
 $CZ \perp BF$ & $EF \perp BF$.
- (ii) $AC = BC$.
- (iii) $KD \perp BC$ and
 $KD \perp DE$.



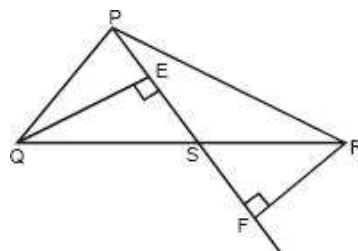
Find the measure of x .

- Q. 10.** A campaign is started by volunteers of Mathematics Club to boost school and its surrounding under Swachchh Bharat Abhiyan. They made their own logo for this campaign. If it is given that $\Delta ABC \cong \Delta ECD$, $BC = AE$. Prove that $\Delta ABC \cong \Delta CEA$.



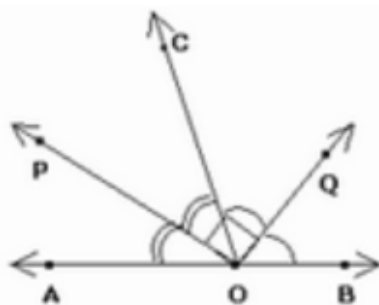
Q. 11. In ΔPQR , the sides QP and RP have been produced to S and T such that $PQ = PS$ and $PR = PT$. Prove that the segment $QR \parallel ST$.

Q. 12. In the given figure, PS is median produced upto F and QE and RF are perpendiculars drawn from Q and R , prove that $QE = RF$.



Q. 13. Factorize: $\frac{1}{27}(2x + 5y)^3 + \left(-\frac{5}{3}y + \frac{3}{4}z\right)^3 - \left(\frac{3}{4}z + \frac{2}{3}x\right)^3$.

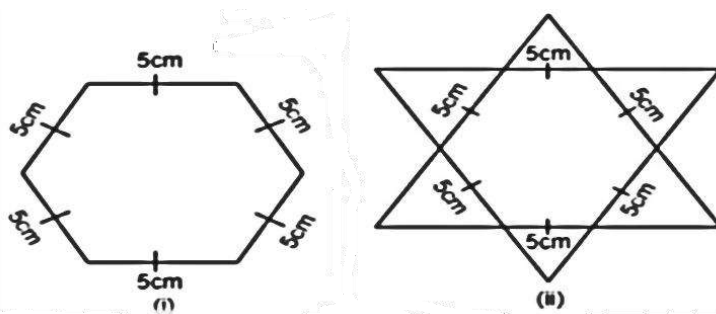
Q. 14. OP bisects $\angle AOC$, OQ bisects $\angle COB$ and $OP \perp OQ$. Show that A, O, B are collinear.



Q. 15. In a triangle ABC , if $\angle A = 2\angle B = 6\angle C$, find the measures of angles A, B and C .

Q. 16. Find the value of $(x - a)^3 + (x - c)^3 + (x - b)^3 - 3(x - a)(x - b)(x - c)$, when $a + b + c = 3x$.

Q. 17. Complete the hexagonal rangoli and the star rangoli (see figure) but filling them with as many equilateral triangles of side 1 cm as you can. Find the number of triangles in each case. Which has more triangles. Show your calculation work.



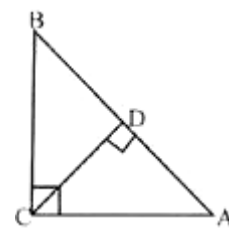
Q. 18. Factorize: $12(y^2 + 7y)^2 - 8(y^2 + 7y)(2y - 1) - 15(2y - 1)^2$.

- Q. 19.** ABCD is a parallelogram, if the two diagonals are equal, find the measure of angle ABC.
- Q. 20.** The ratio of the number of students in two classrooms, C_1 and C_2 , is 2:3. It is observed that after shifting ten students from C_1 to C_2 , the ratio is 3:7. Further, how many students have to be shifted from C_2 to C_1 for the new ratio to become 9:11?

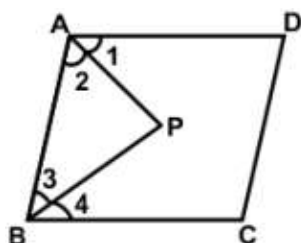
- Q. 21.** The area of a right-angled triangle is 24 cm^2 and the length of its hypotenuse is 10 cm. Then find the length of the shortest side.

- Q. 22.** If $\frac{(x^3+ax^2+bx+4)}{(x^2+x-2)}$ is a polynomial of degree 1 in x , then what are the values of a and b ?

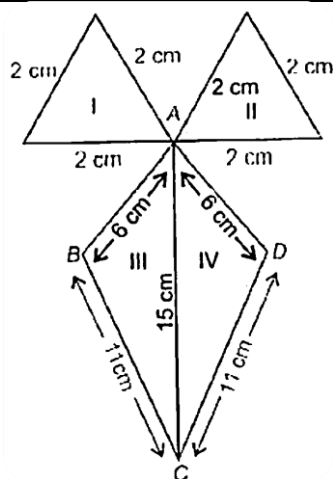
- Q. 23.** In a right-angled triangle ABC, $\angle C = 90^\circ$ and CD is the perpendicular on the hypotenuse AB. If $AB = c$, $BC = a$, $AC = b$ and $CD = p$, then prove that $\frac{1}{p^2} = \frac{1}{a^2} + \frac{1}{b^2}$.



- Q. 24.** In the given figure, AP and BP are angle bisectors of $\angle A$ and $\angle B$, respectively which meet at P on the diagonal AC of the parallelogram ABCD. Then what is the value of $2\angle APB$?



- Q. 25.** Tanya joined four triangles of cardboard to create a mask of Joker as shown in the given figure. Find the total area of the mask. [Given $\sqrt{2} = 1.41, \sqrt{3} = 1.73$].



Science

NOTE: Write the following assignment in subject wise class notebooks.

PHYSICS:

1. How is the pressure related to the area of a surface? What is the SI unit of pressure?
2. An object of mass 50 kg is placed on a table. Each leg of the table has a surface area of 12.5 cm^2 . What is the net pressure exerted by the table on the floor? Take $g = 9.8 \text{ m/s}^2$.
3. Under which condition does an object float or sink? Steel is denser than water but how then an empty steel bottle float on water?
4. What is Archimedes' principle? Which force do we come to know about from this principle?

CHEMISTRY:

1. In a reaction, 10 g of calcium reacts with some amount of chlorine to form 27g calcium chloride. According to the law of conservation of mass, what is the mass of chlorine reacted?
2. 17 g of NH_3 contains 14 g of nitrogen and 3 g of hydrogen. Calculate the percentage of each component present in ammonia.
3. In magnesium oxide (MgO), 24 g of magnesium combines with 16 g of oxygen. If a sample of magnesium oxide contains 1.2 g of magnesium, calculate the mass of oxygen that will combine with this amount of magnesium.
4. 1g hydrogen combines with 8 g oxygen to form 9 g of water. Calculate the mass of water formed when 5g of hydrogen combines with 8 g oxygen. Which law is being followed here?

BIOLOGY

1. Classify simple epithelium tissue on the basis of their shape. Also mention the location of that particular tissue.
2. Draw and practice the diagram of Areolar and Adipose tissue.

3. Mention the name of various types of Proper and Specialized connective tissue.
4. Differentiate between different types of Muscular tissue with the help of diagram.

**Social
Science**

PROJECT

Topic:-"Exploring the Fascinating World of Medicinal Plants in India."

Or

Title: **The Rich Diversity of Medicinal Plants in India: A Focus on Tropical Moist, Dry Deciduous and Tropical evergreen Forest Ecosystems in Chhattisgarh.**



India is renowned for its extensive array of medicinal flora, which plays a vital role in traditional medicine and local healthcare practices. Each region boasts unique climatic conditions and cultural practices that shape the use and significance of these plants. In tropical evergreen forests, characterized by high rainfall and warm temperatures, a myriad of medicinal plants thrive, contributing to the ecological balance and cultural heritage of the area. The local communities often possess extensive knowledge of these plants, utilizing them for healing and wellness

Based on the above information,

Prepare a project that centres on the rich diversity of medicinal plants found across India, with a particular emphasis on tropical moist deciduous forests, tropical dry deciduous forests and tropical evergreen ecosystem-'**State of Chhattisgarh**'

Your project should incorporate the following guidelines:-

② **Write ethnobotanical information of medical plants of Chhattisgarh:-**

Plant Identification: Identify medicinal plants by their local and botanical names.

Geographical Distribution: Mention the specific forested areas in

Chhattisgarh, such as Bastar, Bilaspur, and Raigarh, where these plants are found.

Traditional Uses: Document how local communities use these plants to treat common ailments (e.g., fever, digestive issues, and respiratory problems).

Cultural Practices: Examine how traditional healers (locally known as Vaidyas) use these plants and pass down knowledge.

Economic Significance: Explore the economic importance of medicinal plant collection and sale for tribal livelihoods.

Any historical or cultural significance.

Investigate the conservation status of these medicinal plants, especially those listed as threatened or endangered.

Explore the role of local communities in conserving medicinal plants, either through traditional cultivation practices or community-based conservation efforts.

Challenges and Threats

Ongoing research on these plants in the medical field.

Demarcate the Medicinal plant in the outline map of India.

Research Process:

After verifying your initial information, proceed with comprehensive research. Utilize multiple sources such as academic journals, books, and reliable news articles to gather data. Ensure that your research is detailed and accurately cited.

Evaluation Criteria:

Your project will be assessed based on several factors:

Cover Page: Ensure it is well-designed with relevant details.

Quality of Research: The depth and reliability of the information gathered.

Writing Clarity: Your ideas should be clearly expressed.

Content: Thoroughness and depth of analysis in your work.

Overall Coherence: How well your report flows and stays on topic.

Submission Guidelines:

Submit your completed project to your subject teacher by October 25, 2024. Include your Name, Class & Section, and the Project Title on the cover page. Your presentation should be clear and concise. You are encouraged to incorporate visuals or diagrams to make your work more engaging.

We wish you success and a rewarding research experience!
Best regards!