DAV MODEL SCHOOL,KSTP, ASANSOL SESSION: 2024-25 HOLYDAY HOMEWORK SUBJECT: ENGLISH WORKSHEET:1 Name_____Class____Sec____Roll no_____

1.Read the following passage and answer the questions:

Power foods are foods that provide rich levels of nutrients like fibre, potassium and minerals. With people becoming increasingly health conscious today, a lot of finess trainers encourage their clients to include these foods in their daily diet to increase muscle development. There are various ways of incorporating power foods in your daily diet. Of course, the key to enjoying power foods is proper preparation of these foods, the use of season-fresh foods, and indentifying your choice of flavour among power foods.Some of the recommended power food combinations are those that are prepared in our kitchens on a regular basis. Take for instance, the combination of chickpeas and onions. This combination is a powerful source of iron which is required by the body to transport oxygen to its various parts. Iron deficiency can lead to anaemia, fatigue, brain fog and tiredness. A study by the Journal of Agricultural and Food Chemistry says that sulphur compounds in onion and garlic help in the absorption of iron and zinc from chickpeas. The combination is a hit with teenagers who need to be diligent about getting iron in their diet. A quick way to prepare this power food is to make a chickpea salad with chopped onions, chaat masala and cilantro.

Another favourite combination with power food takers is yoghurt and bananas. This makes for a perfect snack after a rough game of football. Exercising burns glucose and thus lowers blood sugar. Yoghurt is packed with proteins that help preserve muscle mass, and bananas are packed with carbohydrates that help in refuelling energy and preventing muscle soreness. A quick and easy recipe with bananas is a banana smoothie topped with cool yoghurt.

Among beverages, green tea is the best source of catechins that are effective in halting oxidative damage to cells. According to researchers at the PurdueUniversity, adding a dash of lemon juice to green tea makes the catechins even more easily absorbable by the body. So, the next time you have instead of are friends serve them rounds of iced green tea with mint and lemon juice.

(a) A lot of fitness trainers encourage their clients to include power foods in their diet. Why?

(b) Which one of the below mentioned food is considered as a power food?



(c) What is the advantage of including onions and garlic in our diet ?

(d) Assertion: A favourite combination with power food takers is yoghurt and bananas .

Reasoning: Yoghurt is packed with proteins that help preserve muscle mass, and bananas are packed with carbohydrates that help in refuelling energy and preventing muscle soreness .

- i.A is correct and R is the right explanation of A.
- ii. A is right but R is not the correct explanation of A.
- iii. A is right and R is wrong.
- iv. A is wrong but R is correct.

2.A new construction company has advertised a new colony ,ready to be completed by January 2025 .Write a letter of enquiry asking for all the details --the size of the flats ,number of storeys, amenities ,security offered, the date of complete possessions and the total cost of owning a flat. Ask them to set a date for a meeting after sending the details. You are Niloy/Neha. **3.**You are Prapti/ Pranay. Your school G.D.Public School, Gurgaon is going to host the Inter-school district chess championship. Now write a notice as the secretary of the chess club of your school calling students to participate.

4.Edit the following passage.

		Incorrect	<u>Correct</u>
In the evening, as I am	e.g	am	was
returning by the office, I	(a)		
saw a disorderly rows to	(b)		
vehicles. An accident had took (c)			
place killing two boys and in	jure (d)		
other three. The boys are	(e)		
driving in high speed.	(f)		

DAV MODEL SCHOOL, KSTP, ASANSOL **SESSION: 2024-25** HOLYDAY HOMEWORK **SUBJECT: ENGLISH** WORKSHEET:2

 Name_____Class___Sec___Roll no _____

1. Rearrange the following to frame meaningful sentences:

a) that / used / he said / in his childhood / to be celebrated / his birthday / differently

(b) distribute sweets / instead of / they / cutting a cake / used to

(c) blow out / but / used to / they/we / candles/light a lamp

(d) weighed / against grain / him / parents / my grandfather's

(e) the poor / distributed / this was / among

2. Read the given excerpt and answer the questions briefly :

There was a pause .Nicola was glaring at his younger brother in vexation."We could not think of troubling you,sir."

a.Why was Nicola glaring at his younger brother?

b. What is the tone of Nicola in the above extract?

c.What trait of Nicola's character is revealed in the extract?

d.Give an appropriate synonym of the word vexation.

3. Answer the following questions in 30-40 words.

a.What is Vikram Seth's primary purpose in bringing out the irony in the statement 'Your song must be your own.'

b."Oh !But it won't hurt, you 'll see" What hidden intention did make the frog speak the above statement?

c ."And the frog observed them glitter with a joy both sweet and bitter." Identify the figure of speech and state a reason why the frog's joy was both sweet and bitter?

d.Why were Nicola and Jacopo evasive about their plans?

4. 'Dont judge a book by its cover ' .How far is this famous adage advocated by the given excerpt from the story 'Two Gentlemen of Verona ''?Write your opinion in about 120 words.



D.A.V. MODEL SCHOOL, KSTP, ASANSOL **SESSION 2024-2025**

Subject: HINDI **WORKSHEET-1**

Name:	Class:X	Sec	Roll No.:

	व्याकरण
1.	रचना के आधार पर वाक्य-भेद
	क) 'दूसरी बार जब हालदार साहब उधर से गुज़रे तो उन्हें मूर्ति में कुछ अंतर दिखाई दिया।' - इस मिश्रित
	वाक्य का संयुक्त वाक्य होगा -
	i. जैसे ही दूसरी बार हालदार साहब
	ii. दूसरी बार उधर से गुजरते समय हालदार साहब को मूर्ति में कुछ अंतर दिखाई दिया।
	iii. दूसरी बार हालदार साहब उधर से गुजरे और उनको मूर्ति में कुछ अंतर दिखाई दिया।
	iv. जब भी हालदार साहब उधर से गुजरते हैं मूर्ति में अंतर दिखायी देता है।
	ख) निम्नलिखित वाक्यों में से मिश्र वाक्य का उदाहरण है :
	i. अजमेर से पहले पिता जी इंदौर में थे।
	ii. हुइदंग तो इतना मचाया कि कॉलेज वालों को थर्ड इयर भी खोलना पड़ा।
	iii. हमने हुड़दंग मचाया और कॉलेज वालों ने थर्ड इयर खोल दिया।
	iv. हमारे हुंड़दंग मचाने के कारण कॉलेज वालों को थई इयर भी खोलना पड़ा।
	ग) निम्नलिखित वाक्यों में से सरल वाक्य वाले उचित विकल्प का चयन कीजिए:-
	i. यानी चश्मा तो था, लेकिन संगमरमर का नहीं था।
	ii. नगरपालिका थी तो कुछ न कुछ करती भी रहती थी।
	iii. दो साल तक हालदार साहब अपने काम के सिलसिले में उस कस्बे से गुज़रते रहे।
	iv. पानवाले के लिए यह एक मज़ेदार बात थी, लेकिन हालदार साहब के लिए द्रवित क वाली।
	घ) निम्नलिखित में से सरल वाक्य पहचानकर लिखिए :-
	i. राधा ने जो पुस्तक माँगी वह उसे मिल गई
	ii. राधा के पुस्तक माँगते ही वह उसे मिल गई।
	iii. राधा ने जैसे ही पुस्तक माँगी वैसे ही उसे मिल गई।
	iv. राधा ने पुस्तक माँगी और उसे मिल गई
	ङ) 'यदि वह दौड़ में प्रथम आएगा तभी उसको पारितोषिक मिलेगा।' - प्रस्तुत रेखांकित आश्रित उपवाक्य
	का रूप बताइए
	i. संज्ञा उपवाक्य ii. विशेषण उपवाक्य iii. क्रियाविशेषण उपवाक्य iv. प्रधान उपवाक्य
2	निर्देशानुसार 'पद परिचय' पर आधारित प्रश्नों के उत्तर लिखिए -
-	क) यह <u>छात्र</u> बहुत समझदार है। इस वाक्य में रेखांकित पद का सही पद परिचय होगा-
	$\frac{1}{2} = \frac{1}{2} + \frac{1}$

	i. संज्ञा, व्यक्तिवाचक, एकवचन, पुल्लिंग, कर्ता कारक ।
	ii. संज्ञा, जातिवाचक, एकवचन, पुंल्लिंग, कर्ता कारक ।
	iii. संज्ञा, जातिवाचक, बहुवचन, पुल्लिंग, कर्ता कारक ।
	iv. संज्ञा, जातिवाचक, एकवचन, पुल्लिग, कर्म कारक ।
	ख) मैं पंकज से <u>जयपुर</u> में मिलूँगा। इस वाक्य में रेखांकित पद का सही पद परिचय होगा-
	i. व्यक्तिवाचक संज्ञा, पुल्लिंग, एकवचन, अधिकरण कारक ।
	ii. जातिवाचक संज्ञा, पुल्लिंग, एकवचन, अधिकरण कारक
	iii. व्यक्तिवाचक संज्ञा, पुल्लिग, एकवचन, कर्म कारक ।
	iv. व्यक्तिवाचक संज्ञा, पुल्लिंग, एकवचन, करण कारक ।
3.	क) गोपियों ने श्रीकृष्ण के प्रति अपने एकनिष्ठ प्रेम को किन उदाहरणों के द्वारा स्पष्ट किया है?
	(25-30 शब्दों में उत्तर लिखिए)
	ख) 'साहस और शक्ति के साथ विनमता हो तो बेहतर है।' इस कथन पर 'राम लक्ष्मण परशुराम संवाद'
	पाठ के आधार पर अपने विचार 25-30 शब्दों में व्यक्त कीजिए
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	·
	ग) यदि हालदार साहब को नेताजी की मूर्ति पर चश्मा लगा नहीं मिलता तो उनके मन में किस प्रकार का
	भाव आता। (25-30 शब्दों में उत्तर लिखिए)
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D.A.V. MODEL SCHOOL

HOLIDAY HOMEWORK WORKSHEET - I

SUBJECT : BENGALI

NAME: _____

____ SEC: _____ ROLL: _____

[TOPIC:জ্ঞানচক্ষু; পোস্টমাস্টার; সন্ধি - ব্যঞ্জন + বিসর্গ]

1. সঠিক উত্তরটি নির্বাচন করে লেখ।

CLASS : X

- ক) "গায়ে কাঁটা দিয়ে উঠল তপনের।" কখন তপনের গায়ে কাঁটা দিয়ে উঠেছিল ?
 - i) তিনতলার সিঁড়িতে বসে একটা আস্ত গল্প লিখে সেটা পড়ার পর
 - ii) ছোট মাসি ও মেসোকে "সন্ধ্যাতারা" পত্রিকার একটা সংখ্যা নিয়ে বাড়িতে আসতে দেখে
 - iii) ''সন্ধ্যাতারা'' পত্রিকার সূচিপত্রে ছাপার অক্ষরে নিজের নাম ও তার লেখা গল্পটি দেখে
 - iv) লেখক ছোট মেসো যখন তার গল্পের তারিফ করেছিল তখন
- খ) "তপন বিহ্বল দৃষ্টিতে তাকায়" কখন ?
 - i) সকলেই যখন তার গল্প পড়ে বাহবা দেয়i i) ব্যতিক্রমী গল্প বলে ছোটমেসো যখন প্রশংসা করেন।
 - iii) ''সন্ধ্যাতারা'' পত্রিকায় যখন গল্পটি প্রকাশিত হয় iv) মেজকাকু যখন ব্যঙ্গ করেন
- গ) কার্য : তপনার পড়তে পারে না। বোবার মত বসে থাকে।
 - কারণ (ক) : নিজের গল্প ছাপা হওয়ার আনন্দে তপন বাকরুদ্ধ হয়ে যায়।
 - কারণ (খ) : নিজের লেখা গল্প ছাপার অক্ষরে দেখে তপন অতিমাত্রায় আবেগ বিহল হয়ে পড়ে।
 - i) কারণ (ক) ঠিক কিন্তু কারণ (খ) ভুল ii) কারণ (ক) ভুল কিন্তু কারণ (খ) ঠিক
 - m iii) কারণ (ক) এবং কারন (খ) দুটোই ঠিক m iv) কারণ (ক) এবং কারন (খ) দুটোই ভুল
- ঘ) কখন ছোটমাসি আত্মপ্রসাদের প্রসন্নতা নিয়ে বসে বসে ডিম ভাজা আর চা খায় ? i) যখন ছোট মেসো ছোট মাসিকে সিনেমা দেখতে নিয়ে যাবে বলে ii) যখন ছোট মাসি এবং ছোট মেসো বেড়াতে যাওয়া ঠিক করোii) মেজকাকু যখন লেখক মেসোর প্রশংসা করেন iv) ''সন্ধ্যাতারা'' পত্রিকায় যখন তপনের গল্প ছাপা হয়
- ৬) তপন মামার বাড়িতে মাসির বিয়ের পরও আরো কিছুদিন রয়ে গেল কেন ?

 i) গল্প লিখবে বলে ii) হোমটাস্ক শেষ হয়নি বলে iii) ছোটমেসো রয়ে গেল বলে iv) স্কুল ছুটি চলছে বলে
- চ) পোস্টমাস্টার গ্রাম ছেড়ে চিরকালের মতো চলে যাবে শুনে, রতন তার কোন ইচ্ছার কথা জানিয়েছিল ?
 - i) তাঁর জায়গায় যিনি আসবেন তিনি যেন রতনকে কাজে বহাল করেন ii) রতনও একবার কলকাতা বেড়াতে যেতে চায়
 - iii) তাকে সঙ্গে করে পোস্টমাস্টারের বাড়ি নিয়ে যাবার কথা iv) রতনের পড়াশোনা বন্ধ না হয় সেই কথা
- ছ) পোস্টমাস্টার যখন পড়াশোনা শেখাবেন বলে রতনকে ডেকে পাঠালেন, তখন সে কি করছিল ?
 - i) হেঁশেলে রান্না করছিল ii) পেয়ারা তলায় ঘুরে ঘুরে কাঁচা পেয়ারা কুড়াচ্ছিল
 - iii) পেয়ারা তলায় পা ছড়িয়ে বসে কাঁচা পেয়ারা খাচ্ছিল iv) পোস্টমাস্টারের ঘর পরিষ্কার করছিল
- জ) পোস্টমাস্টার অবসর সময়ে কি লিখতেন ?
 - i) উপন্যাস ii) নাটক iii) কবিতা iv) গল্প
- ঝ) পোস্টমাস্টার যে কারণ দেখিয়ে বদলির আবেদন করেছিলেন তা হলো
 - i) স্থানীয় অস্বাস্থ্যকর পরিবেশ ii) বেতন আশানুরূপ নয় iii) চোর ডাকাতের উৎপাত iv) বাড়িতে মায়ের অসুস্থতা
- ঞ) পোস্টমাস্টার নিচে রান্না করে খেতে। কারণ
 - i) তাঁর বেতন অতি সামান্য ছিল ii) তিনি রান্না করতে ভালবাসতেন
 - iii) অন্যের হাতের রান্না খেতে তিনি পছন্দ করতেন না iv) তাঁর মা রান্না করে খেতে বলেছিলেন

2.	সন্ধি বিচ্ছেদ কর।	

ক) অকুতোভয় খ) বাৱাই গ) সন্ধি ঘ) নিষ্কাম ঙ) উচ্চকিত চ) বাগ্জাল ছ) দুর্যোগ জ) তড্ডিম্ব ঝ) বয়ঃক্রম ঞ) দুরদৃষ্ট উত্তর :

 সন্ধিবদ্ধ পদটি লেখ।
 ক) নিঃ + রোগ খ) দুঃখ + যোগ গ) উৎ + যোগ ঘ) উৎ + ডীন ঙ) অহঃ + রাত্রি
 চ) দিক্ + মণ্ডল ছ) দুঃ + থ জ) সর্বম + সহা ঝ) তদ্ + চিন্তা এঃ) চতুঃ + টয় উত্তর :

5. প্রশ্নগুলির যথাযথ উত্তর লেখ।

ক) "এর প্রত্যেকটা লাইন তো নতুন আনকোরা, তপনের অপরিচিত।" - i) কার লেখা, কোন্ গল্প থেকে আলোচ্য অংশটি গৃহীত হয়েছো়া) "এর" বলতে কিসের কথা বলা হয়েছে ? iii) কেন তপনের এমন মনে হয়েছিল ? উত্তর :------

()	"বুকের রক্ত ছলকে ওঠে তপনের।" - i) তপন কে ? ii) কখন তপনের বুকের রক্ত ছলকে উঠেছিল ?
	iii) কেন তপনের বুকের রক্ত ছলকে উঠেছিল ?
	উত্তর :
)	"তাহা হইলে এই আধমরা ভদ্র সন্তানটি পুনন্চ নবজীবন লাভ করিতে পারে।" - i) "আধমরা ভদ্রসন্তান" বলতে কাকে
,	
	বোঝানো হয়েছে ? ii) তাকে ''আধমরা ভদ্রসন্তান'' বলা হয়েছে কেন ? iii) কী করলে সে নবজীবন লাভ করতে পারে ?
	উত্তর :
)	"আমার জন্য কাউকে কিছু ভাবতে হবে না।" -
	i) বক্তা কাকে উদ্দেশ্য করে কথাগুলি বলেছে ? ii) কখন এ কথা বলেছে ? iii) এ কথা বক্তা কেন বলেছিল ?
	উত্তর :

বিভিন্ন ধার্মিক ও সামাজিক উৎসবের সময়ে মাইকের যথেচ্ছ ব্যবহার ও উৎপাত সম্পর্কে জানিয়ে সংবাদপত্রের সম্পাদককে খ) একটি পত্র লেখ৷ উত্তর :------

"নির্মমভাবে অরণ্যনিধন ও তার প্রত্যক্ষ ফলস্বরূপ পরিবেশ দূষণ" - এই বিষয়ে সংবাদপত্রের সম্পাদককে একটি পত্র লেখ।

ACTIVITY: CLASS - X

 পাঠের অন্তর্গত ছোটগল্পগুলির মত কোন তামিল ছোটগল্পের লেখক, গল্পের নাম ও গল্পের বিষয়বস্তু সম্পর্কে লেখো। (শব্দ সংখ্যা - ৫০/৬০)

2. ব্যঞ্জনসন্ধির সূত্রগুলি রেখাচিত্রের সাহায্যে সুন্দরভাবে প্রদর্শন করো।

নিম্নলিখিত যেকোনো একটি বিষয় অবলম্বনে পত্র রচনা কর।

6.

ক)

{ DO THESE TWO ACTIVITIES IN COLOUR A4 PAGE AND ATTACH THEM NICELY IN YOUR BENGALI PORTFOLIO COPY }

D.A.V. MODEL SCHOOL, KSTP, ASANSOL HOLIDAY HOMEWORK (WORKSHEET 1) SESSION: 2024-2025

SUBJECT: MATHEMATICS

CLASS: X

Name _____ Roll No: _____ Section:

A. Tick the Correct Option :-

1. If HCF (a, b)=12 and $a \times b = 1800$, then LCM(a, b)= b) 900 C) 150 a) 3600 d) 90

2. Two representations of real numbers are shown below.



Which representation is correct?

3.If a and b are co-prime numbers, then HCF (a, b) is

a) 2 b) 1 c) 3 d) 5

4. A quadratic polynomial whose zeroes are-3 and 4 is

a) x^2-x+12 b) x^2-x-12 c) x^2+x+12 d) $2x^2+2x-24$

In the following questions 5 and 6, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true
- 5. Assertion (A). The number 5^n cannot end with the digit zero, where n is a natural number.

Reason(R). Prime factorisation of 5 has only two factors, 1 and 5.

6. Assertion (A). if the product of two numbers is 5780 and their HCF is 17, then their LCM is 340.

Reason(R). HCF is always a factor of LCM.

B. Short Answer Type Questions:

7. If one zero of the $5z^2 + (13 - P)z - 6$ is negative of the other, then find P.

8. If LCM (x,18) = 36 and HCF (x,18) = 2, then find the value of x.

C. Long Answer Type Question:

9. Prove that $3 + 2\sqrt{5}$ is irrational

D. CASE STUDY 1: The below picture are few natural examples of parabolic shape which is represented by a quadratic polynomial. A parabolic arch is an arch in the shape of a parabola. In structures, their curve represents an efficient method of load, and so can be found in bridges and in architecture in a variety of forms.





- i) In the standard form of quadratic polynomial, $ax^2 + bx + c$, $(a \neq 0)$ a, b and c are_____
- **ii**) Draw the graph of $p(x) = x^2 + 1$
- **iii**) If α and $1/\alpha$ are the zeroes of the quadratic polynomial $2x^2 x + 8k$, then find k.

Or

If the sum of the roots is -p and product of the roots is -1/p, then find the quadratic polynomial.

DAV MODEL SCHOOL, KSTP, ASANSOL HOLIDAY HOMEWORK (WORKSHEET 2) SESSION - 2024-2025

SUBJECT – MATHEMATICS

CLASS-X

NAME-

_____, SEC-___, ROLL No.-____

A. Tick the Correct Option :-

1. If A and B be the zeroes of the quadratic polynomial $2x^2+5x+1$, then value of A + B + AB is

a) -2	b) -1	c) 1	d) 4
2. If	1- cos²A =	$=\frac{3}{4}$, then sinA is	s equal to	
	1	1 700		

a) $\frac{1}{2}$ b) $\frac{1.732}{2}$ c) 1 d) 0

3. sin2A = 2 sinA is true when A=

a) 0° b) 30° c) 45° d) 60°

4. $5\tan^2 A - 4\sec^2 A - \sec^2 A$ is equal to

a) 1 b) 5 c) -5 d) 10

In the following questions 5 and 6, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true
- 5. Assertion(A): In a right ΔABC, right angled at B, if tanA=1, then 2sinA.cosA=1

Reason(**R**): cosecA is the abbreviation used for cosecant of angle A.

6. Assertion(A): sinA is the product of sin & A.

Reason(R): The value of $\sin\theta$ increases as θ increases

B. Short Answer Type Questions:

7. If secA = $x + \frac{1}{4x}$, prove that secA + tanA = 2x or $\frac{1}{2x}$

8. Prove that: $\sin^4 A + \cos^4 A = 1 - 2\sin^2 A \cos^2 A$

C. Long Answer Type Question:

9. Prove that $\sqrt{3}$ is an irrational number.

D. Case Study 2

1. Three friends - Anshu, Vijay and Vishal are playing hide and seek in a park. Anshu and Vijay hide in the shrubs and Vishal have to find both of them. If the positions of three friends are at A, B and C respectively as shown in the figure and forms a right angled triangle such that AB = 9 m, $BC = 3\sqrt{3}$ m and $\langle B = 90^{\circ}$, then answer the following questions.



A

- i) Find the measure of angle A.
- ii) Find the measure of angle C.
- iii) Calculate the length of AC. Or

Find the value of Cos2A - Sin3A.

DAV MODEL SCHOOL,KSTP,ASANSOL HOLIDAY HOME WORK SESSION :- 2024-25

Class:- X

Sub:- Science

1. Two lenses are shown. Which statement is correct about lens A?

- a) It is concave and forms a real Image at the focal point of converging rays
- b) It is convex and forms a virtual image at the focal point of diverging rays
- c) It is concave and forms a real image at the focal point of diverging rays
- d) It is convex and forms a real image at the focal point of converging rays



2.Observe the diagram and match column I with column II.

Column I	Column II
i	a. The length of this depends on the food organisms ea
ii	b. Initial phase of starch digestion.
iii	c. Increases the efficiency of Lipase enzyme action.
iv	d. This is the site of complete digestion of
	carbohydrates, proteins and fats.
a) i-a,ii-b,	ii-c,iv-d b) i-b,ii-d,iii-c,iv-a
c) i-b.ii-c.iii-d.iv-a d) i-d.ii-a.iii-b.iv-c	

3. When an incident ray of light enters a medium from air, it bends towards the normal. Which of the following is true about the refractive index of the medium (n_m) as compared to the refractive index of air (n_a) ?

- a) n_m is equal to n_a
- b) n_m is less than n_a
- c) n_m is greater than n_a
- d) the refractive indices cannot be compared based on the given information

4. What does the activity help to conclude, when the person exhales into the test tube?

- a) Percentage of carbon di oxide is more in inhaled air.
- b) Fermentation occurs in presence of oxygen.
- c) Percentage of carbon di oxide is more in exhaled air.
- d) Fermentation occurs in [presence of carbon di oxide





5. Which of the following statements about the given reaction are correct?

$3Fe~(s) + 4H_2O~(g) \rightarrow Fe_3O_4~(s) + 4~H_2~(g)$	
(i) Iron metal is getting oxidised	(ii) Water is getting reduced
(iii) Water is acting as reducing agent	(iv) Water is acting as oxidising agent
(a) (i), (zi) and (iii)	(b) (in) and (iv)
(c) (i), (ii) and (iv)	(d) (ii) and (iv)

6. . A substance 'X' is used in white-washing and is obtained by heating limestone in the absence of air. Identify 'X'.

(a) CaOCl ₂	(b) Ca (OH) ₂
(c) CaO	(d) $CaCO_3$

DIRECTION: In the following questions, a statement of Assertion(A) is followed by a statement of Reason(R).Mark the correct choice as:

A. Both A and R are true and R is the correct explanation.

B. Both A and R are true and R is not the correct explanation.

C. A is true R is false.

D. A is false R is true.

7. **Assertion** (A) : Higher is the refractive index of a medium or denser the medium, lesser is the velocity of light in that medium.

Reason (**R**) : Refractive index is inversely proportional to velocity.

A:

8. Assertion (A): The rate of breathing in an aquatic organism is much faster than in terrestrial organism.
 Reason (R): The amount of oxygen dissolved in water is much lower than the amount of oxygen in air.
 A:

9. Assertion (A): Decomposition of vegetable matter into compost is an example of exothermic reactions. Reason (R): Exothermic reaction are those reactions in which heat is absorbed.

A:-____

10. The power of a lens (P) is calculated by the formula, P = 1/f where f is the focal length of the lens. A lens has a focal length of -0.25 m. Is it a convex lens or a concave lens? Explain your answer.

A:_____

11. The leaves of a plant were covered with Aluminium foil, how would it affect the physiology of the plant?

A:_____

12. The amount of gas collected in one of the test tubes in the above experiment double of the amount collected in

the other. Comment.

A:-__



13. Absolute refractive index of some of material is tabulated below

MATERIAL	ROCK SALT	KEROSENE	WATER	DIAMOND
Refractive index	1.54	1.44	1.33	2.42

a) In which of these does light travel fastest and why?

b) Arrange these materials in ascending order of their optical densities.

A:_____

14. When a sportsman runs ,he/she often gets muscle cramps. Why?

A:

15. Oxidation-Reduction reactions are reactions that involve the transfer of electrons between chemical species. A simple definition of redox reactions considers oxidation as the gain of oxygen atoms and reduction as the loss of oxygen atoms. A redox reaction can also be defined as a reaction in which some of the elements undergo a

change in oxidation number. The oxidizing agent is by definition the substance containing the atom which shows

a decrease in oxidation number. Redox reactions are electron transfers by definition.

(a) Name the two oxidizing agent and reducing agent each.

(b) Define redox reaction.

16. The given below images are those of a specialized slide projector. Slides are small transparencies mounted in sturdy frames ideally suited to magnification and projection since they have a very high resolution and a high image quality. There is a tray where the slides are to be put into a particular orientation so that the viewers can see the enlarged erect images of the transparent slides. This means that the slides will have to be inserted upside down in the projector tray.



- a) Based on the text and picture, what kind of lens must the slide projector have?
- b) A slide projector has a convex lens with a focal length of 20 cm. The slide is placed upside down 21 cm from the lens. How far away should the screen be placed from the slide projector's lens so that the slide is in focus?

A:_____

A:_____

17. How are the lungs designed in Human beings to maximise the area for exchange of gases?

18. (a) A converging lens forms a real and inverted image of an object at a distance of 100 cm from it.Where should an object be placed in front of the lens, so that the size of the image is twice the size of the object? Also, calculate the power of a lens.(b) State laws of refraction.

A:-____

D.A.V. MODEL SCHOOL, KSTP, ASANSOL SESSION: 2024-2025 WORK SHEET NO.:- 1

- C. A is correct and R is incorrect.
- D. A is wrong but R is correct.

III. Identify the given figure and write its characteristics.



IV. Which of the following aspect of Bismarck is identifiable in this image?



a) His democratic nature b) His violent and strict nature c) His sympathetic nature d) None of these

V. Identify the region shown on the map. How did this region become a source of Nationalist tension in Europe after 1871?





V. Solve the crossword puzzle :

Across

- 1. He was the architect of German unification
- **5.** Introduced the Civil Code of 1804
- 6. The artist Frederic Sorrieu belongs to this country **Down**

2. He remarked, "Mazzini is the greatest enemy of our social order."

3. Elle, the measuring unit in Germany was used to measure this

4. He started the secret society 'Young Italy'

VI. Read the source given below and answer the question that follow :

Source : Majoritarianism in Sri Lanka in 1956, an act was passed to recognise Sinhala as the only official language, thus, disregarding Tamil. The governments followed preferential policies that favoured Sinhala applicants for university positions and government jobs. A new constitution stipulated that the state shall protect and foster Buddhism.

Why did the Sri Lankan Tamils feel alienated? Ans.

VII. Study the cartoon and answer the following questions :



1. Identify the two leaders shown in the cartoon.

2. What according to this cartoon is the relationship between democracy and concentration of power?

Ans. _____

VIII. In Jaygaon Municipality, there are three caste groups. In the municipal election a particular caste group was not allowed to cast their votes so that the present elected representative can continue to be in power. Ultimately majority of the representatives got elected from a certain caste suppressing the political opinion of many people.

Here the power sharing arrangement shows –

a) Equal division of power

- c) Division of power among different social groups
- b) Accommodation of all caste groups
- d) Majoritarian measures

IX. Describe the measures adopted by the democratic government of Sri Lanka to establish Sinhala supremacy.

Ans.

X. Fill in the blanks

1. _____ and _____ are the two languages generally spoken in Belgium.

2. The system of 'checks and balances' comes under ______ form of power sharing.

3. A government for the entire country is usually called ______.

4. ______ is referred to as social division based on shared culture and language.

5. Sinhala was recognized as the only official language by the Act of ______.

XI. Why do we find the Belgian model very complicated? How has it helped to prevent conflict and division of the country on linguistic lines?

Ans.

XII. Explain the different forms of power sharing.

Ans.

D.A.V. MODEL SCHOOL, KSTP, ASANSOL SESSION: 2024-2025 WORK SHEET NO.:- 2

SUBJECT: Social Science (Geo. / Eco.)		CLASS: X
Name	_ Roll No:	Section:
I. Tick the correct options :		
1. Khadar is a type of –		
a) Black soil b) Alluvial soil c) Laterite soil d) Desert s	oil	
2. In which year was the Earth Summit held?		
a) 1990 b) 1991 c) 1992 d) 1993		
3. Land degradation due to over irrigation can be seen in the stat	tes of –	
a) Punjab and Haryana b) Assam and West Bengal c) Oris Meghalaya	sa and Jharkhand	d) Mizoram and
4. Assertion (A) : Mining sites are abandoned after excavation w	ork is complete.	
Reason (R) : Mining activities contribute significantly in land	degradation	
a) Both A and R are true, and R is the correct explanation of A.		
b) Both A and R are true, but R is not the correct explanation of	f A.	
c) A is true but R is false.		
d) A is false but R is true.		
5. Look at this news clip –		
	• • •	

Kenyan Startup Uses the Sun to Turn Human Waste into Cooking Fuel

A Kenyan startup scales up its processing of human waste with a new continuous flow system creating a new fuel stream for cooking.

Do you think this start-up will make a profitable business in India?

- a) Yes, because the source, human waste is technologically accessible & economically feasible in India.
- b) Yes, because the Indian population ranks no.1 in the World & the start-up can get abundant raw materials.
- c) No, because majority of Indian society culturally do not accept human waste as a source of energy.
- d) None of the above.

II. Read the source given below and answer the questions that follow :

Source : The history of colonisation reveals that rich resources in colonies were the main attractions for the foreign invaders. It was primarily the higher level of technological development of the colonising countries that helped them to exploit resources of other regions and establish their supremacy over the colonies. Therefore, resources can contribute to development only when they are accompanied by appropriate technological development and institutional changes. India has experienced all these in different phases of colonisation. Therefore, in India, development, in general, and resource development in particular does not only involve the availability of resources, but also the technology, quality of human resources and the historical experiences of people.

a) What helped the colonising countries establish their supremacy over the colonies?

Ans.

b) What were the main attractions for the foreign invaders?

Ans.

c) What were the factors involved for the development in India?

Ans.

III. Study the pictures below and complete the table that follow :







o states in India where it is	Write any two physical characteristics of this
	soil
	o states in India where it is

IV. Study the data given below and answer the question that follows. Some comparative data on Punjab, Kerala and Bihar:

State	Infant Mortality rate per 1,000 (2003)	Literacy Rate (%) (2001)	Net attendance Ratio for Classes I-Vm(1995-96)
Punjab	49	70	81
Kerala	11	91	91
Bihar	60	47	41

a) Which state appears the most developed? Give two reasons for your answer.

Ans.____

V. What is Human Development Index? Which organization measures the HDI? Explain the three major indicators of the HDI.

Ans.

VI. To compare the development of countries, their _____ is considered to be one of the most important attributes.

a) income b) population c) demographics d) none of the above

VII. Which of the following statements about money are true?

a) Money cannot buy you a pollution-free environment.

b) Money cannot ensure that you get unadulterated medicines.

c) Money may also not be able to protect you from infectious diseases.

d) All of the above.

- VIII. Assertion (A) A high average income is not indicative of the overall wellbeing of a country.
 Reason (R) Average income does not cover human development indicates like level of education, health and public facilities.
 - a) Both A and R are true, and R is the correct explanation of A.
- b) Both A and R are true, but R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false but R is true.
- IX. Read the source given below and answer the questions that follow :

For comparing countries, their income is considered to be one of the most important attributes. Countries with higher income are more developed than others with less income. This is based on the understanding that more income means more of all things that human beings need. Whatever people like, and should have, they will be able to get with greater income. So, greater income itself is considered to be one important goal. Now, what is the income of country? Intuitively, the income of the country is the income of all the residents of the country. This gives us the total income of the country. However, for comparison between countries, total income is not such a useful measure. Since, countries have different populations, comparing total income will not tell us what an average person is likely to earn. Are people in one country better off than others in a different country? Hence, we compare the average income which is the total income of the country divided by its total population. The average income is also called per capita income. In World Development Reports, brought out by the World Bank, this criterion is used in classifying countries. Countries with per capita income of US\$ 12,056 per annum and above in 2017, are called rich countries and those with per capita income of US\$ 955 or less are called low-income countries. India comes in the category of low middle income countries because its per capita income in 2017 was just US\$1820 per annum. The rich countries, excluding countries of Middle East and certain other small countries, are generally called developed countries.

i) The passage given above relates to which of the following options?

a) education b) income c) health d) all of these

ii) The income of the country is the income of:-

a) few states of the country

- b) tax collected from public
- c) deposits in the bank accounts
- d) all the residents of the country

iii) The income which is the total income of the country divided by its total population is known as:

a) average income b) per capita income c) revenue income d) all of the above

iv) India comes in which of the following categories of countries based on Per Capita Income?

- a) Rich countries
- b) Low-income countries
- c) Low middle income countries
- d) Highest income countries