

DAV Public School, DVC MTPS, Bankura
Summer Holiday Homework 2026

Class: X

Subject: English

1. CREATIVE WRITING

The narrator of the fiction ‘Two Gentlemen of Verona’ writes a travel blog (in the form of infographic) about his visit to Italy. Write the blog with pictures of important places, persons and items as mentioned in the story along with his emotions about the people of that place whom he came across.

[PROJECT OVERVIEW: THE VERONA CHRONICLES (A TRAVEL INFOGRAPHIC BLOG)]

Students will design a handwritten, multi-page travel infographic blog from the perspective of the narrator of A.J. Cronin’s ‘Two Gentlemen of Verona’. The project will capture his journey through Italy, highlighting the key places, items, and people (especially the two boys, Nicola and Jacopo) from the story, blending factual geographical travel logs with deep emotional insights.

Important Instructions: Format of the Project

Medium: Use a whole chart paper, folded down the middle to look like a multi-page travel brochure or a large-format infographic booklet (creating 4 distinct pages).

Execution: All content must be neatly handwritten and hand-drawn.

Visual Elements: Use colorful headings, artistic borders, sketches, and clear infographic elements (like timelines, maps, and emotional temperature bars).

Layout: Maintain a classic blog-meets-infographic layout featuring catchy blog post titles, distinct text columns, author bylines, photo-captions (for your drawings), and callout boxes for emotional reflections.]

2. DIGITAL POSTER

‘A healthy mind resides in a healthy body.’ Based on the given statement prepare a digital poster (in any photo editing software) to spread awareness among students to be circulated through social media about the importance of maintaining good health.

D.A.V. PUBLIC SCHOOL , DVC , MTPS
SESSION : 2025-2026
SUMMER VACATION HOMEWORK

CLASS : X

SUBJECT : BENGALI

১) নীচের অনুচ্ছেদটি পাঠ করে সঠিক বিকল্প উত্তর বেছে নিয়ে লেখো-(৪)২
দস্যুদল এসে পড়ল। ধুমসো লোমশ তিকাতী কুকুরগুলো আমাদের দিকে তাকিয়ে প্রচণ্ড ঘেউ ঘেউ করছে। তাদেরও ভাবটা দস্যুদেরই মতো। আমাদের দলের লোকগুলোর অবস্থা কাহিল। যে যেখানে ছিল সব জবুথবু হয়ে বসে পড়েছে। এইসব দস্যু সাধারণত যাযাবরদের আস্তানায় গিয়ে পড়ে সর্বস্ব লুট করে নিয়ে চলে যায়। উপযুক্ত অস্ত্র ছাড়া এদের বাধা দিতে যাওয়া মানে নিশ্চিত মৃত্যু। অবিশ্যি এরা যদি তিব্বতী পুলিশের হাতে পড়ে তাহলে এদের চরম শাস্তির ব্যবস্থা আছে। গদান আর ডান হাতটা কেটে নিয়ে সেগুলোকে সোজা রাজধানী লাসায় পাঠিয়ে দেওয়া হয়। কিন্তু এই যুদ্ধ প্রান্তরে বরফে ঢাকা গিরিবর্মের আনাচে কানেচে এদের খুঁজে বার করা মোটেই সহজ নয়। এও শুনেছি যে এইসব দস্যুদের নিজেদেরও নাকি নরকভোগের ভয় আছে। তাই এরা লুটপাট বা খুনখারাপী করে নিজেরাই, হয় কৈলাস প্রদক্ষিণ করে, না হয় কোনো উঁচু পাহাড়ের চূড়ায় দাঁড়িয়ে গলা ছেড়ে নিজেদের পাপের ফিরিস্তি দিয়ে প্রায়শ্চিত্ত করে নেয়।

ক) ধুমসো লোমশ তিব্বতী কুকুরগুলো ভাবটা কাদের মতো ছিল?

অ. পুলিশের মতো আ. শিকারীর মতো ই. হিংস্র জন্তুজানোয়ারদের মতো ঙ. দস্যুদের মতো

খ). এইসব দস্যুরা সাধারণত কোথায় গিয়ে লুটপাট চালায়?

অ. নিকটস্থ গ্রামের বাড়িতে আ. চোরাকারবারীদের আস্তানায় ই. যাযাবরদের আস্তানায়

ঙ. আশেপাশের রাজ্যগুলিতে

গ). এইসব দস্যুদের নিজেদের কিসের ভয় আছে?

অ. নরকভোগের আ. ফাঁসির ই. যাবজ্জীবন কারাদণ্ডের ঙ. তিব্বতী কুকুরদের আক্রমণে মৃত্যুর প্রদত্ত প্রশ্নগুলির সঠিক বিকল্প উত্তরটি নির্বাচন করে লেখ –

১। “ ক্রমশ ও কথাটাও ছড়িয়ে পড়ে “ - কোন কথাটাও ছড়িয়ে পড়ে

ক) তপনের গল্প তার মেসো ছাপিয়ে দেবার প্রতিশ্রুতি দিয়েছে।

খ) মেসো তপনের প্রতিভার প্রশংসা করেছে।

গ) মেসো তপনের গল্প কারেকশন করেছে।

ঘ) মেসোর মতে গল্পটা ভালো হয় নি।

২। “ আরে বাবা ক্ষেপছিস কেন ? জিজ্ঞেস করছি বই তো নয় “ - কে কোন প্রসঙ্গে একথা বলেছিল ?

ক) তপনের বাবা তাকে লেখক , সাহিত্যিক বলে ঠাট্টা করার পর।

খ) তপনের ছোট মাসি তার বরকে গল্পটি দেখিয়ে আসার পর।

গ) তপনের ছোট মাসি গল্পটি তপনের নিজের লেখা নয় বলে সন্দেহ প্রকাশ করার পর।

ঘ) মা তপনকে তার লেখা গল্পটি পড়তে বলার পর।

৩। মন্তব্য- তা হোক নতুন নতুন অমন হয়

কারণ-ক) তপন প্রথম গল্প লিখেছে, তাই অমন হতেই পারে।

খ) নতুন মেসো বিয়ের পর প্রথম তপনদের বাড়িতে এসেছে বলে বেশি আদর যত্ন করা হচ্ছে।
বিকল্প কারণগুলির মধ্যে সঠিকটি নির্বাচন করে লেখ।

- i) কারণ (ক) ঠিক হলেও কারণ (খ) ভুল।
- ii) কারণ (ক) ভুল কিন্তু কারণ (খ) ঠিক।
- iii) কারণ (ক) এবং কারণ (খ) দুটি ভুল।
- iv) কারণ (ক) ও (খ) দুটি ঠিক।

৪। কার্য - “এর প্রত্যেকটি লাইন তো নতুন আনকোরা তপনের অপরিচিত।”

কারণ - (ক) তপন নিজে গল্পটি লেখেনি বলে।

কারণ - (খ) তপনের মেসো গল্পটিকে আগাগোড়া কারেকশন করেছেন বলে।

কার্য ও কারণ বিষয়ে প্রদত্ত বিকল্পগুলির মধ্যে কোনটি গ্রহণযোগ্য

- i) কারণ (ক) ঠিক হলেও কারণ (খ) ভুল।
- ii) কারণ (ক) ভুল হলেও কারণ (খ) ঠিক।
- iii) কারণ (ক) এবং (খ) দুটোই ঠিক।
- iv) কারণ (ক) এবং (খ) দুটোই ভুল।

৫। পোস্টমাস্টার চলে যাবার পরও রতনের মনে হয়েছিল -

- ক) পোস্টমাস্টার ফিরে আসবেন, যাবেন না।
- খ) পোস্টমাস্টার ফিরে এসে রতনকে নিয়ে যাবেন।
- গ) পোস্টমাস্টার কোনদিন তাকে ভুলতে পারবেন না।
- ঘ) পোস্টমাস্টার তাকে বিবাহের প্রস্তাব পাঠাবেন।

৬। কার্য - পোস্টমাস্টার চাকরি ছেড়ে চলে যাচ্ছেন।

কারণ - (ক) পোস্টমাস্টারের বদলি মঞ্জুর হয়নি।

কারণ - (খ) পোস্টমাস্টার কলকাতায় ভালো চাকরি পেয়েছেন।

কার্য ও কারণ ভিত্তিক প্রদত্ত বিকল্পগুলির মধ্যে কোনটি গ্রহণযোগ্য

- i) কারণ (ক) ও (খ) দুটোই ঠিক।
- ii) কারণ (ক) এবং (খ) দুটি ভুল।
- iii) কারণ (ক) ঠিক হলেও কারণ (খ) ভুল।
- iv) কারণ (ক) ভুল হলেও কারণ (খ) ঠিক।

৭। প্রকল্প - তোমার কোন পাহাড় ভ্রমণের অভিজ্ঞতা রঙিন চিত্রসহ ২০০ শব্দ সংখ্যার মধ্যে বর্ণনা কর

৮। জ্ঞানচক্ষু গল্পটি ১০ টি চিত্রের মাধ্যমে কমিক আকারে উপস্থাপন কর।



Summer Holiday Homework 2026

Class: X Subject: HINDI

1. निम्नलिखित पठित पद्यांश पर आधारित बहुविकल्पी प्रश्नों के सर्वाधिक उपयुक्त विकल्प चुनकर लिखिए:-

बिहसि लखन बोले मृदु बानी। अहो मुनीसु महाभट मानी ॥
पुनि-पुनि मोहि देखाव कुठारु। चहत उड़ावन फूँकि पहारु ॥
इहाँ कुम्हड़बतिया कोउ नाहीं। जे तरजनी देखि हरि नाहीं ॥
देखि कुठारु सरासन बाना। मैं कछु कहा सहित अभिमाना ॥
भृगुसुत समुझि जनेउ विलोकी। जो कछु कहहु सह रिस रोकी ॥
सुर महिसुर हरिजन अरु गाई। हमरे कुल इन्ह पर न सुराई ॥
बधे पापु अपकीरति हारें। मारतहूँ पा परिअ तुम्हारे ॥

i) 'बिहसि लखन बोले मृदु बानी। अहो मुनीसु महाभट मानी' यह कथन का उदाहरण है-

- (क) व्यंग्य का (ख) हास्य का
(ग) क्रोध का (घ) वैराग्य का

ii) निम्नलिखित पंक्तियों में से किस पंक्ति से लक्ष्मण के शक्तिशाली होने का पता चलता है? सही विकल्प का चयन कीजिए-

- (I) बिहसि लखनु बोले मृदु बानी। अहो मुनीसु महाभट मानी ॥
(II) पुनि पुनि मोहि देखाव कुठारु। चहत उड़ावन फूँकि पहारु ॥
(III) देखि कुठारु सरासन बाना। मैं कछु कहा सहित अभिमाना ॥
(IV) इहाँ कुम्हड़बतिया कोउ नाहीं। जे तरजनी देखि मरि जाहीं ॥

- विकल्प
(क) कथन (II) सही है। (ख) कथन (I) सही है।
(ग) कथन (III) सही है। (घ) कथन (IV) सही है। क

iii) कथन (A) और कारण (R) को ध्यानपूर्वक पढ़कर सही विकल्प चुनकर लिखिए -

कथन (A): रघुकुल में वीरता का प्रदर्शन नहीं किया जाता है।

कारण (R): वे देवता ब्राह्मण, ईश्वर भक्त और गाय पर वीरता का प्रदर्शन नहीं करते हैं।

- (क) कथन (A) और कारण (R) दोनों सही हैं।
(ख) कथन (A) और कारण (R) दोनों गलत हैं।
(ग) कथन (A) सही है किन्तु कारण (R) गलत है।
(घ) कथन (A) गलत है किन्तु कारण (R) सही है।

iv) उपर्युक्त पद्यांश में लक्ष्मण के चरित्र की कौन-सी विशेषता उजागर होती है?

- (क) वीरता (ख) धैर्य
(ग) शिष्टता (घ) विनम्रता

v) परशुराम बार-बार अपना कुठार किसे और क्यों दिखा रहे हैं?

- (I) राम को भयभीत करने के लिए
(II) लक्ष्मण को भयभीत करने के लिए
(III) विश्वामित्र को भयभीत करने के लिए
(IV) महाराज जनक को भयभीत करने के लिए

विकल्प

(क) कथन (III) सही है।
(ग) कथन (IV) सही है।

(ख) कथन (II) सही है।
(घ) कथन (1) सही है।

2. निर्देशानुसार रचना के आधार पर 'वाक्य भेद' पर आधारित प्रश्नों के उत्तर लिखिए:-

- i) जब जाड़ा आता तब बालगोबिन भगत एक काली कमली ऊपर से ओढ़े रहते। (संयुक्त वाक्य में बदलिए)
- ii) यद्यपि जीप कस्बे से आगे बढ़ गई परंतु हालदार साहब मूर्ति के बारे में सोचते रहे। (वाक्य का भेद लिखिए।)
- iii) 'जो मुख्य गायक है उसके बिना संगतकार का अस्तित्व नहीं है।' (इसे सरल वाक्य में बदलिए।)
- iv) रीड नरकट से बनाई जाती है जो डुमराँव में मुख्यतः सोन नदी के किनारों पर पाई जाती हैं। (आश्रित उपवाक्य छाँटकर उसका भेद लिखिए।)
- v) 'कस्बे में एक बड़ा बाजार और एक नगर पालिका भी थी।' (वाक्य का भेद लिखिए।)
- vi) आग व सुई-धागे का अविष्कार कराने वाली योग्यता संस्कृति है। (वाक्य को मिश्र वाक्य में बदलिए)

3. निर्देशानुसार 'वाच्य' पर आधारित प्रश्नों के उत्तर लिखिए:-

- i) पंत ने प्रकृतिपरक कविताएँ लिखी हैं। (कर्मवाक्य में बदलिए)
- ii) मुझसे हंसा नहीं जाता। (वाच्य पहचानकर भेद का नाम लिखिए)
- iii) उनके द्वारा मुझे सच्चाई का अहसास कराया गया। (कर्तृवाच्य में बदलिए)
- iv) वह उन आटे की गोलियों को लेकर गंगा जी की ओर चल पड़ते। (वाच्य पहचानकर वाच्य-भेद का नाम लिखिए)
- v) किस वाच्य में क्रिया सदैव सकर्मक होती है?

4. निम्नलिखित प्रश्नों के उत्तर लिखिए:-

- i) गोपियों ने सच्चे राजधर्म को किस प्रकार परिभाषित किया है? क्या आपको गोपियों का यह दृष्टिकोण उचित लगा 25-30 शब्दों में कारण स्पष्ट कीजिए।
- ii) सूरदास के पठित पद के आधार पर 25-30 शब्दों में लिखिए की वीडियो गोपियों की मनोदशा क्यों नहीं समझ सके?
- iii) गोपियों को कहाँ से मदद मिलने की आस लगी थी, पर उनकी आशा निराशा में कैसे बदल गई?
- iv) 'श्री कृष्ण के चरित्र में कुशल राजनीतिज्ञ के गुण दिखाई देते हैं।' वर्तमान समय के राजनीति के संदर्भ में उक्त कथन की व्याख्या 25-30 शब्दों में लिखिए।
- v) हालदार साहब की आँखें भर आने का क्या कारण रहा होगा? अपने विचार लिखिए।
- vi) 'देशभक्ति भी आजकल मजाक की चीज होती जा रही है।' इस पंक्ति में लोगों की किस मानसिकता की ओर संकेत किया गया है? 25-30 शब्दों में अपना उत्तर लिखिए।

गतिविधि

'भारत को आज़ाद करवाने में आज़ाद हिंद फ़ौज की भूमिका' पर 120 शब्दों में अनुच्छेद लिखिए। (A4 साइज़ पेपर या चार्ट पेपर में बनाइए)

DAV Public School, DVC MTPS, Bankura

Summer Holiday Homework 2026

Class : X

Subject : Sanskrit

01. प्रथमः तथा द्वितीयः पाठस्य आधारेण अधोलिखित-प्रश्नाः दीयन्ते ।

(क) प्रदत्तप्रश्नानाम् उत्तराणि एकपदेन लिखत ।

- (i) कस्याः कोशः अपूर्वः ?
- (ii) केन समं तपः न अस्ति ?
- (iii) शीतलसलिलस्य चन्दनरसस्य शीतलछायायाः शीतलता कया समं न भवति ?
- (iv) प्रथमे श्लोके सप्तमी विभक्तियुक्तपदं किम् अस्ति ?
- (v) धियः द्वितीयगुणं किम् अस्ति ?
- (vi) अक्षराणां स्पष्टोच्चारणम् इति अर्थे श्लोके किं पदं प्रयुक्तम् ?
- (vii) षट् गुणाः कस्य सन्ति ?
- (viii) सहपाठीभिः इत्यर्थे किं पदं पद्यांशे प्रयुक्तम् ?
- (ix) भगवान् बोधिसत्वः पुत्रवत् काः पालयति स्म ?
- (x) शक्रः कः ?
- (xi) बोधिसत्वः केषां राजा अभवत् ?
- (xii) नेत्रदानार्थं निश्चयं ज्ञात्वा के विषण्णाः जाताः ?

02. प्रथमः तथा द्वितीयः पाठस्य आधारेण अधोलिखित-प्रश्नाः दीयन्ते ।

(ख) प्रदत्तप्रश्नानाम् उत्तराणि पूर्णवाक्येन लिखत ।

- (i) वाङ्मयं तपः इति पाठ्यांशे देवी सरस्वती किं किं नामे विराजिता अस्ति ?
- (ii) भारत्याः कोशः कथम् अपूर्वः अस्ति ?
- (iii) बुद्धेः सर्वशेषगुणं किम् अस्ति ?
- (iv) कस्य स्वाध्यायाभ्यसनं वाङ्मयं तपः उच्यते ?
- (v) शक्रः किमर्थं तत्र आगतवान् ?
- (vi) कस्मात् पापतरः न अस्ति ?
- (vii) राजा कथम् आत्मानम् अनुगृहीतं कर्तुम् इच्छति ?
- (viii) कः चिरपरिक्लेशयोग्यः न अस्ति ?
- (ix) अदीयमानः धनं किम् प्राप्नुवन्ति ?
- (x) शिवेः राज्ये याचकाः किं लब्धाः सन्तुष्टाः अभवन् ?

03. अधोलिखित श्लोकस्य अन्वयं पूर्यत ।

अनुद्वेगकरं वाक्यं सत्यं प्रियहितं च यत् ।

स्वाध्यायाभ्यसनं चैव वाङ्मयं तपः उच्यते ॥

अन्वयः – यत्----- अनुद्वेगकरं , सत्यम् ----- च (तस्य) स्वाध्याय ----- च एव
वाङ्मयं ----- उच्यते ।

04. अधोलिखितवाक्येषु रेखाङ्कितानि पदानि आधृत्य प्रश्ननिर्माणं कुरुत ।

- (i) का का शब्दैः वातावरणम् आकुलीक्रियते ।
(ii) सुप्तान् प्रोवधयामि कर्मसु च विनियोजयामि ।
(iii) अस्माकम् एक्यं तु जगत्प्रसिद्धम् ।
(iv) जनैः सर्वदा गीयते तव विषये ।
(v) चञ्चुदेशे माणिक्यरत्नं ग्रथितं यदि ।
(vi) नीरक्षीरविवेके वकहंसयोः भेदः दृश्यते ।
(vii) अहम् अत्र वृष्टेः अभिनन्दं करोमि ।
(viii) आपत्काले सरांसि त्यक्त्वा दूरं व्रजसि ।
(ix) दुग्धधवला मे पक्षा ।
(x) मीनान् अधिगृह्य क्रूरतया भक्षयसि ।

05. अधोलिखित पदानां सन्धिविच्छेदं कुरुत ।

- (i) सन्निधिम् = (ii) सञ्चयात् =
(iii) चैव = (iv) स्वाध्यायाभ्यसनम् =
(v) बौद्धाचार्यस्य = (vi) भवन्मनोरथम् =
(vii) चक्षुर्दयमेव = (viii) नीलोत्पलम् =
(ix) प्रत्यारोपणाय = (x) निधनैकनिष्ठम् =

06. अधोलिखितपदानां प्रत्ययात् विभज्य लिखत ।

- (i) प्राप्य = (ii) विलोक्य =
(iii) कर्तुम् = (iv) श्रुत्वा =
(v) द्रष्टुम् = (vi) उक्त्वा =
(vii) मत्वा = (viii) प्रविश्य =
(ix) धृत्वा = (x) अधिगृह्य =
(xi) स्थित्वा = (xii) मिलित्वा =

07. परियोजना कार्यम् - वयं तृतीयपाठम् अपठाम , तत्र बहवः पक्षिणः सन्ति तेषु वयं किं किं गुणं ग्रहीतुं शक्नुमः इति विषये तेषां चित्रं निर्माय गुणानि च लिखत । (As a project)

DAV PUBLIC SCHOOL, DVC, MTPS


HOLIDAY HOME WORK 2026 -2027

CLASS – X

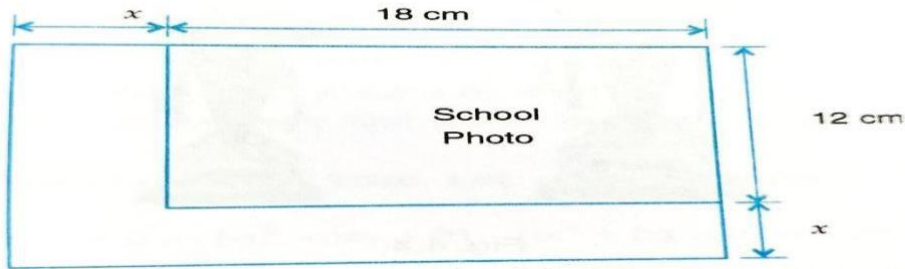
SUBJECT – MATHEMATICS


Ch. :- 01 Real Numbers

	<p>In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.</p> <p>(A) Both A and R are true but 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.</p>	
1	<p>Assertion (A): The polynomial $x^2 + kx + 4$ has sum of zeroes equal to -2. Then the value of k is 2.</p> <p>Reason (R): Sum of zeroes of $ax^2 + bx + c$ is $-b/a$</p>	
2	<p>Choose the correct answer out of the following choices.</p> <p>Assertion (A): If product of two numbers is 5780 and their HCF is 17, then their LCM is 340.</p> <p>Reason (R): HCF is always a factor of LCM.</p>	
3	<p>Assertion (A): 6^n ends with the digit zero, where n is natural number.</p> <p>Reason (R): Any number ends with digit zero, if its prime factor is of the form $2^m \times 5^n$, where m, n are natural numbers</p>	
4	<p>Assertion (A): Since 7 divides 8281, 7 can divide 91.</p> <p>Reason (R): For any natural number p and a, if p divides a^2, then p divides a also.</p>	
5	<p>Find the LCM and HCF of the pair of integers 510 and 92 and verify that $LCM \times HCF = \text{Product of two numbers}$.</p>	
6	<p>A merchant has 105 litres of oil of one kind, 120 litres of another kind and 150 litres of third kind. He wants to sell the oil by filling the three kinds of oil in tins of equal capacity. What should be the greatest capacity of such a tin?</p>	
7	<p>Prove that $3 + 2\sqrt{5}$ is irrational ?</p>	
8	<p>Find the least number which when increased by 17 is exactly divisible by 520 and 468.</p>	
9	<p>Find the largest positive integer that will divide 398, 436 and 542 leaving remainder 7, 11 and 15 respectively</p>	
10	<p>CASE BASED QUESTION:</p> <p>Mr. Dubey is a librarian of a district library. Due to the ongoing remodeling of the library, he has to shift all the belongings into another building of the same campus. There is a different section for Social Science. He has to place 60 History books, 108</p>	

	<p>Political Science books and 330 Economics books into some particular segments of Social Science almirah in such a way that each segment contains equal number of books for a particular subject.</p>  <p>Based on the above information answer the following questions.</p> <p>(i) Find the number of highest possible segments. (ii) Find the number of each type of book in a particular segment.</p> <p style="text-align: center;">OR</p> <p>Find the minimum number of books for a subject to be kept in library so that each subject has equal number of books.</p> <p>(iii) Find the total number of books in each segment.</p>	
Ch.02 – Polynomials		
1	<p>In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices</p> <p>(A) Both A and R are true but 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</p> <p>Assertion (A): The polynomial $x^2 + kx + 4$ has sum of zeroes equal to -2. Then the value of k is 2. Reason (R): Sum of zeroes of $ax^2 + bx + c$ is $-b/a$</p>	
2	<p>Find the value of “p” from the polynomial $x^2 + 3x + p$, if one of the zeroes of the polynomial is 2.</p>	
3	<p>α and β are zeroes of the quadratic polynomial $x^2 - 6x + y$. Find the value of ‘y’ if $3\alpha + 2\beta = 20$.</p>	
4	<p>Find the value of k such that $3x^2 + 2kx + x - k - 5$ has the sum of zeroes as half of their product</p>	
5	<p>If $(x + 2)$ is a factor of $x^2 + px + 2q$ and $p + q = 4$ then what are the values of p and q?</p>	
6	<p>If $(x + a)$ is a factor of two quadratic polynomials $x^2 + px + q$ and $x^2 + mx + n$,</p>	

	<p>then prove that</p> $a = \frac{n-q}{m-p}$	
7	<p>CASE STUDY QUESTION</p> <p>An asana is a body posture, originally and still a general term for a sitting meditation pose, and later extended in hatha yoga and modern yoga as exercise, to any type of pose or position, adding reclining, standing, inverted, twisting, and balancing poses. In the figure, one can observe that poses can be related to representation of quadratic polynomial.</p> <div style="display: flex; justify-content: space-around;"> <div> </div> <div> </div> </div> <div style="text-align: center; margin: 20px 0;"> </div> <div style="display: flex; justify-content: space-around;"> <div>Fig.1</div> <div>Fig.2</div> </div> <p>Based on the above mentioned information and figures answer the following questions.</p> <ol style="list-style-type: none"> (i) Write the name of the shape of the poses shown in figure.1. (ii) Write the two zeroes of the quadratic polynomial whose graph is shown in figure.2. (iii) Find the polynomial whose graph is shown in figure.2. <p style="text-align: center;">OR</p> <ol style="list-style-type: none"> (iii) If a person is performing Adho Muktasvana on x-axis with hands touching (5,0) and legs are at origin, find the quadratic polynomial formed by that person. 	
CHAPTER: 4 QUADRATIC EQUATIONS		
1	<p>In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Choose (the correct answer out of the following choices).</p> <p>Assertion (A): One solution of the quadratic equation $(x - 1)^2 - 5(x - 1) - 6 = 0$ is 0</p> <p>Reason (R): Other solution of the equation $(x - 1)^2 - 5(x - 1) - 6 = 0$ is 7 .</p> <ol style="list-style-type: none"> (A) Both Assertion (A) and Reason (R) are true and reason (R) is the correct explanation of Assertion (A). (B) Both Assertion (A) and Reason (R) are true and reason (R) is not the correct explanation of Assertion (A). (C) Assertion (A) is true but Reason (R) is false. 	

	(D) Assertion (A) is false but Reason (R) is true.	
2	Find the value of k if the quadratic equation $kx^2 - 6x + 2 = 0$ has equal roots.	
3	The age of a man is twice the square of the age of his son. Eight years hence, the age of the man will be 4 years more than three times the age of his son. Find their present ages.	
4	In a class test, the sum of Vivek's marks in Hindi and English is 30. Had he got 2 marks more in Hindi and 3 marks less in English, the product of the marks would have been 210. Find his marks in the two subjects.	
5	If the equation $(1 + m^2)x^2 + 2mcx + c^2 - a^2 = 0$ has equal roots then show that $c^2 = a^2(1 + m^2)$.	
6	A train travels at a certain average speed for a distance of 63 km and then travels a distance of 72 km at an average speed of 6km/h more than its original speed. If it takes 3 hours to complete the total journey, find the original speed.	
7	The sum of the areas of two squares is 468 m^2 . If the difference of their perimeters is 24 m, find the sides of the two squares.	
8	<p>CASE STUDY</p> <p>A rectangular photo is 18 cm long and 12 cm wide, A teacher asked the student that the length and width of this photo is increased by x cm each to double the area of the photo.</p>  <p>Based on the above information, answer the following questions:</p> <ol style="list-style-type: none"> Find the area of the original photo. Write an algebraic equation depicting the above information. Write the corresponding quadratic equation in standard form. Also find the value of x. <p style="text-align: center;">OR</p> <p>Find the new dimension of the enlarged photo.</p>	
CHAPTER: 5 ARITHMETIC PROGRESSION		
1	<p>Directions : In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Mark the correct choice as:</p> <ol style="list-style-type: none"> Both A and R are true and R is the correct explanation of A. Both A and R are true but R is not the correct explanation of A. A is true but R is false. A is false but R is true. 	

	<p>Assertion (A): If n^{th} term of an A.P is $(2n + 1)$, then the sum of its first three terms is 15.</p> <p>Reason(R): The sum of first 16 terms of the A.P 10, 6, 2,is - 320.</p>	
2	Find the sum of first 20 terms of the following A.P: 1, 4, 7, 10,	
3	If S_n , the sum of first n terms of an AP, is given by $S_n = 3n^2 - 4n$, find the n^{th} term.	
4	In an A.P, if $S_5 + S_7 = 167$ and $S_{10} = 235$, then find the A.P, where S_n denotes the sum of first n terms.	
5	Find the sum of all 11 terms of an A.P whose middle most term is 30.	
6	If in an A.P, the sum of first m terms is n and the sum of its first n terms is m then, prove that the sum of its first $(m+n)$ terms is $-(m+n)$.	
7	If the ratio of the 11^{th} term of an A.P to its 18^{th} term is 2:3, find the ratio of the sum of the first five terms to the sum of its first 10 terms.	
8	<p><u>CASE STUDY BASED QUESTION:</u></p> <p>Your elder brother wants to buy a car and plans to take loan from a bank for his car. He repays his total loan of Rs.1,18,000 by paying every month starting with the first instalment of Rs.1000 and he increases the instalment by Rs.100 every month.</p>  <p>Based on the above informations answer the following questions:</p> <p>(i) Find the amount paid by him in 38^{th} instalment.</p> <p>(ii) If total instalments are 40, then find the amount paid in the last instalment.</p> <p style="text-align: center;">OR</p> <p>Find the ratio of the first instalment to the last instalments.</p> <p>(iii) Find the total amount paid by him upto 30 instalments.</p>	1+2+1
ACTIVITY		
1	To verify that the given sequence is an arithmetic progression by paper cutting and pasting method .	
2	To verify that the sum of first n natural numbers is $n(n + 1)/2$, that is $\Sigma n = n(n + 1) / 2$ by graphical method .	

	PROJECT		
	1) Survey and map the heights of school building or trees . 2) Art Integrated Project : West Bengal and Tamil Nadu .		

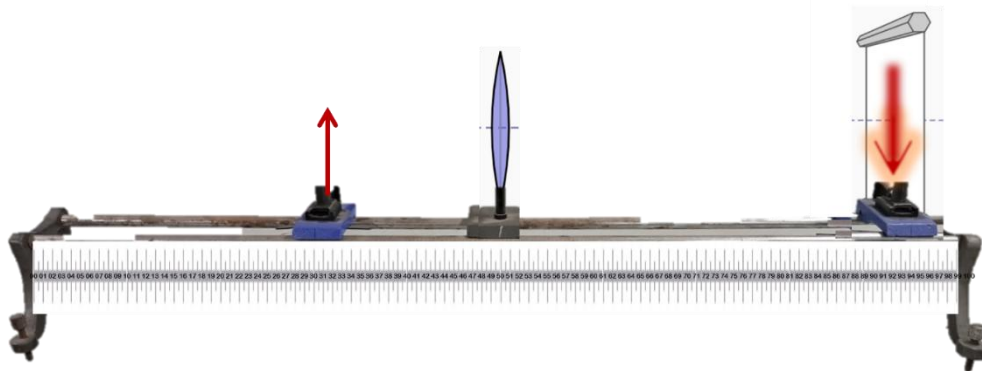
D.A.V. PUBLIC SCHOOL, DVC, MTPS
HOLIDAY HOMEWORK
SESSION: 2026-2027

CLASS: X
SUBJECT: SCIENCE

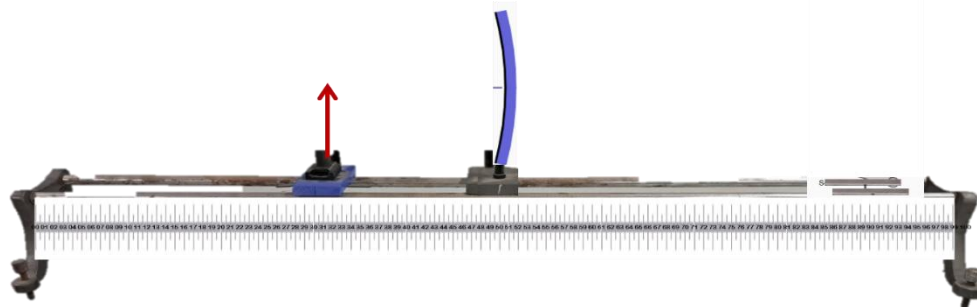
PHYSICS

1. 1. Read the text carefully and answer the following questions:

One day Soumya and his friends wanted to verify the mirror and lens formula which they learnt in their class. They were performing an experiment with optical bench. In their experiment, a convex lens of focal length of **15 cm** is placed at **50 cm mark** on an optical bench as shown in figure. An arrow shaped object of height **8 cm** is placed at **30 cm** mark on the same bench. One of his friends, Aranya, hold a screen at **94 cm**



on bench to get the real image. But they got the image blurred. By keeping the lens and the object fixed, they moved the screen and ultimately got a sharp, clear and inverted image of arrow on screen. Then they noted the position of image and measured the height of image. Thereafter, they obtained the image distance from lens formula and verified the experimental result with the calculated value.



After that they replaced the lens with a concave mirror of focal length **12 cm**. Again, Anubhab got the exact position of screen for sharp image after several trial. They used mirror formula to obtain image distance to substantiate the experimental data.

- (a) When they got clear and sharp image formed by lens, the screen was placed at
(i) 90 cm mark (ii) 100 cm mark (iii) 110 cm mark (iv) 80 cm mark

	<p>(b) The height of the image formed by lens is (i) 8 cm (ii) 12 cm (iii) 16 cm (iv) 24 cm</p> <p>(c) When they got clear and sharp image formed by mirror, the screen was placed at (i) 10 cm (ii) 20 cm (iii) 30 cm (iv) 40 cm</p> <p>(d) The height of the image formed by the mirror is (i) 4 cm (ii) 8 cm (iii) 12 cm (iv) 24 cm</p>	
2.	<p>Following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:</p> <p>(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.</p> <p>Assertion(A): Power of a parallel glass slab is zero. Reason (R): The ray passing through a parallel glass slab doesn't undergo any angular bending after emergence.</p>	
3.	Find the minimum time taken by a ray of monochromatic light to cross a thick glass panel of thickness 5 mm if the refractive index of the given glass panel is $\frac{3}{2}$.	
4.	CHEMISTRY	
	<p>Assertion (A): Rusting of iron is an oxidation reaction. Reason (R): Iron combines with oxygen and moisture to form hydrated iron(III) oxide.</p>	
5.	<p>A green coloured metal sulphate labelled as 'A' on heating decomposes into a brown oxide 'B' along with the evolution of two gases C and D . Further, the metal in compound A can displace a metal E from its blue coloured sulphate solution.</p> <p>a) Identify compounds A to E . b) Write balanced equation for the thermal decomposition of compound A. c) Write the reaction of the metal in A with the salt solution of metal E.</p>	
6.	<p>Priya noticed that her silver jewellery became black after a few months. Her mother explained that silver reacts with sulfur present in air to form a black coating of silver sulphide.</p> <p>Questions:</p> <p>a) What is the chemical formula of the black coating? b) Which type of reaction causes this change? Is silver being oxidized or reduced? c) Name one method to restore the shine of silver articles.</p>	
7.	BIOLOGY	
	<p>Assertion (A): Transpiration helps in the absorption and upward movement of water and minerals from roots to leaves.</p> <p>Reason (R): Transpiration creates a suction pull (transpirational pull) which acts like a straw .</p>	

8.	A patient's medical report shows a significantly low hemoglobin count. How will this condition affect the patient's energy levels and why?	
9.	A student sets up an experiment where two potted plants are kept in the dark for 48 hours. Plant A is then placed in a bell jar with potassium hydroxide (KOH), while Plant B is in a bell jar without KOH. Both are exposed to sunlight for 6 hours. Why is Plant A likely to fail the starch test while Plant B passes?	
10.	Why is the separation of the right and left sides of the heart considered a major evolutionary advantage for mammals and birds?	
	NOTE: ANSWERS FOR DIFFERENT SECTIONS TO BE WRITTEN IN THE RESPECTIVE SUBJECT COPIES.	

D.A.V. PUBLIC SCHOOL, DVC, MTPS, Bankura

Summer Holiday Homework 2026

CLASS: X

SUBJECT: SOCIAL SCIENCE

INDIA AND THE CONTEMPORARY WORLD - II

1.	The concepts of liberty and equality, which emerged during the French Revolution, motivated many individuals in Europe. Question: In what ways did these concepts contribute to the development of nationalism in Europe? Mention any two.
2.	Consider the below-given scenario: Within a certain area of Europe, there were diverse languages and various rulers. The citizens, who were intellectuals, wanted a single nation where there would be equality and a constitution. Question: Analyse the above situation and explain any three factors that led to the rise of nationalism in Europe.
3.	A student says, "Culture was a very important factor in fostering nationalism in Europe." Justify the statement by explaining any three ways in which culture helped to strengthen nationalist feelings in Europe.

DEMOCRATIC POLITICS - II

1.	Activity Title: "How Belgium Avoided Conflict" Belgium had two major communities — the Dutch-speaking and the French-speaking people. Due to differences in language and political power, tensions increased between the communities. However, Belgium successfully managed the problem through a unique system of power sharing. Task: Prepare a flowchart showing: 1) Issues that affect Belgium because of its social diversity 2) Measures undertaken by the Belgium government for power sharing among communities 3) Write a brief conclusion: "What lesson is learnt by India from Belgium on power sharing?"
2.	Activity Title: "Build Your Own Federal Country" Imagine you are the Chief Advisor of a newly formed country called " Diverse Indiax " where people speak different languages, follow different cultures, and live in different regions. Your task is to design a Federal System of Government for this country. Prepare a mind map showing: 1. Why one single government cannot manage the whole country effectively 2. Division of powers among: o Central Government o State Governments o Local Governments 3. Give at least 2 responsibilities for each level of government.

CONTEMPORARY INDIA - II

1.	Activity Title : Vanishing Wildlife: A Conservation Case Study Prepare a Case Study on any one endangered animal of India. Your project should include the following sections: 1. Introduction 2. Natural Habitat of the Animal 3. Causes of extinction 4. Conservation Efforts 5. Importance of Wildlife Conservation 6. Conclusion
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	<p>Activity Instructions :</p> <ol style="list-style-type: none"> 1. Add suitable pictures, maps, graphs, charts, and statistical data related to the animal. 2. Include recent and current information collected from newspapers, government reports, wildlife websites, or magazines. 3. Mention all sources of information at the end of the case study. 4. Use proper headings, subheadings, and neat presentation. 5. The activity should be completed within 3-4 A4 size pages.
2.	<p>Activity Title: Forest and Wildlife Resources.</p> <p>Prepare a creative and informative Mind Map (<i>A4 sheet or chart paper format</i>) on the topic “Forest and Wildlife Resources”. Your mind map should clearly show the following points:</p> <ol style="list-style-type: none"> 1. Conservation of Forest and Wildlife in India 2. Types and Distribution of Forest and Wildlife Resources 3. Community and Conservation
<p><u>UNDERSTANDING ECONOMIC DEVELOPMENT</u></p>	
1.	<p>Conduct interviews with five individuals from different age groups and professions — for example, a 5-year-old child, a senior citizen, a teacher, a shopkeeper, or a doctor. Ask them what “development” means to them and what kind of life they aspire to lead. Prepare a detailed report highlighting their views and explain how developmental goals may differ from person to person based on their needs, age, occupation, and lifestyle.</p>
2.	<p>Design and draw the layout of your ideal sustainable neighbourhood on an A3 sheet or chart paper. Include eco-friendly and sustainable features such as rainwater harvesting systems, rooftop solar panels, green parks, waste management facilities, public health clinics, cycling tracks, and clean public transport. Also, give a creative and innovative name to your sustainable city and briefly describe its special features.</p>
<ul style="list-style-type: none"> • Complete this History & Political Science activity on A4 size pages and submit it in a channel file. 	