UP Board Class 10 Complete Guide 2026-27

English · Complete Guide

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Publisher: KAMALDNP

Price: FREE (₹0)

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UP Board Class 10 — Syllabus Book 2027 (High School Examination)

Author: Raj Kamal **Publisher:** KAMALDNP **Price:** FREE (Rs. 0 / ₹0) **Meta description:** UP Board Class 10 syllabus book 2027: all subjects, full syllabus with weightage, theory notes and practice questions. Free.

About this book

This book follows the **official UPMSP syllabus for Class 10 (High School), session 2026-27, in syllabus order** — the order in which the official syllabus prints the units and topics. It is a textbook-style book, not a guide: every subject carries its full chapter list with weightage, short theory notes, key points, and practice questions.

How to use it: Study one unit at a time in the order printed here. The marks beside each unit tell you how much weight it carries in the theory paper. Do the practice questions after each unit, then check the answer key at the end of the subject. The internal-assessment work (projects, practicals, unit tests) is marked in school — do not leave it for the last month.

What this book does NOT do: It does not copy textbook text. NCERT books are the prescribed base for most subjects — this book gives you the syllabus, the weightage, short notes in your own words, and practice material. Read the prescribed textbook for the full lessons.

Sources: Official UPMSP syllabus PDFs (quoted in the research file), the official 2027 date-sheet notice (12 Oct 2026), and the UPMSP homepage (upmsp.edu.in). Exact per-subject syllabus PDF links are taken from the live UPMSP site (Board_Syllabus.aspx) at build time — no PDF link is guessed here.

The exam at a glance

Item	Detail
Board	Uttar Pradesh Madhyamik Shiksha Parishad (UPMSP), Prayagraj
Exam	High School Examination (Class 10), session 2026-27
Subjects	5 compulsory (Hindi, English, Mathematics, Science, Social Science) + 1 optional subject = 6 subjects
Marks per subject	100 = 70 theory + 30 project / internal assessment
Theory paper	50 subjective + 20 MCQ on OMR (computer-evaluated)

Item	Detail
Pass	33% in each subject (where the syllabus prints it: 23 written + 10 internal = 33)
Paper duration	3 hours 15 minutes (morning 8:30–11:45 AM; evening 2:00–5:15 PM)
Theory exams	Friday 5 February – Wednesday 24 February 2027
Practicals	Phase 1: Monday 11 – Tuesday 19 January 2027; Phase 2: Wednesday 20 – Thursday 28 January 2027
Internal-assessment portal	Active from Friday 1 January 2027
Registered (2027)	High School 27,75,741 + Intermediate 24,28,972 = 52,04,713
Exam centres	7,526 proposed

Only two subjects have board-conducted practicals — Science and Home Science (external examiner, CCTV mandatory). All other subjects do school-level internal assessment / project work. Individual (private) candidates should contact their exam-centre principal for practical arrangements.

Internal assessment (all subjects): 4 unit tests (2nd week July, last week August, last week November, last week December — each 20 marks, total converted to 10; the first unit test = 10 summer-holiday homework + 10 test) plus subject-specific August / December components. Monthly tests have been replaced by these 4 unit tests in 2026-27.

2026 cycle (for reference only): theory 18 Feb – 12 Mar 2026; results declared Thursday 23 April 2026; Class 10 pass 90.42%. Do not mix the 2026 timetable with the 2027 one.

Not announced yet (as of 24 November 2026): admit card 2027 date, result 2027 date, model papers 2027, compartment 2027 dates. No date is printed for these in this book.

Theory exam dates — Class 10, 2027

Date	Subject
Fri 5 Feb 2027	Hindi (901) / Elementary Hindi (902)
Mon 8 Feb 2027	Social Science (932)
Tue 9 Feb 2027 (evening)	Human Science (942)
Wed 10 Feb 2027	English (917)
Wed 10 Feb 2027 (evening)	IT-ITeS + all vocational trades (shared slot)
Fri 12 Feb 2027	Home Science (930)
Sat 13 Feb 2027	Mathematics (928)

Date	Subject
Mon 15 Feb 2027	Sanskrit (923)
Tue 16 Feb 2027	Additional languages
Wed 17 Feb 2027	Science (931) / Sangeet — Vadan (934, evening)
Thu 18 Feb 2027 (morning)	Computer (941) / Tailoring (939)
Fri 19 Feb 2027	Commerce (935)
Sat 20 Feb 2027	Urdu
Mon 22 Feb 2027	Painting (940)
Tue 23 Feb 2027	Sangeet — Gayan (933, morning) / Pali, Arabic, Persian (evening)
Wed 24 Feb 2027	Agriculture (937) — LAST paper

No exams on Sundays 7, 14, 21 February 2027. Saturday 6 February and Thursday 11 February have no Class 10 paper listed (Class 12 papers run those days).

Note on dates: The English paper is **Wednesday 10 February 2027** — settled from the official exam programme and six sources. Do not confuse it with the Class 12 English / Civics dates (8 vs 9 February), which belong to Class 12 only.

Part A — Hindi (हिन्दी) — Code 901

Exam: Friday 5 February 2027 | **Marks:** 70 theory + 30 internal = 100 | **Paper:** Section A (MCQ) 20 marks + Section B (descriptive) 50 marks

Prescribed textbook: Board-prescribed Hindi textbook (Gadya / Padya Sankalan). The syllabus prints the prescribed texts themselves — the 7 prose lessons, 13 poets, 9 Sanskrit lessons and the district-wise khand kavya list below. Elementary Hindi (code 902) has its **own** syllabus — never present this syllabus as Elementary Hindi.

Unit	What it covers	Marks
Unit 1 — Prose (गद्य)	History of prose literature 5 + Prose section 11	16
Unit 2 — Poetry (पद्य)	History of poetry literature 5 + Poetry section 11 + Khand Kavya 3 + Elements of poetic beauty 3	22
Unit 3 — Sanskrit (संस्कृत खण्ड)	Sanskrit section — 9 lessons	14
Unit 4 — Letter, Grammar and Essay	Letter writing 4 + Grammar 7 + Essay 7	18

Unit	What it covers	Marks
Total theory		**70**
Internal assessment	Oral expression test 10 (August) + Creative writing test 10 (December) + 4 unit tests → 10	**30**

Unit 1 — Prose (गद्य) — 16 marks

What to learn: The history of Hindi prose literature — how prose writing developed, its main forms (essay, story, memoir, travelogue, biography) and its major writers — and the seven prescribed prose lessons themselves.

Prose lessons (7, in syllabus order): 1. **मित्रता** — आचार्य रामचन्द्र शुक्ल (an essay on friendship: what true friendship is, and how it is tested) 2. **ममता** — जयशंकर प्रसाद (a story of a mother's love and sacrifice) 3. **भारतीय संस्कृति** — डॉ. राजेन्द्र प्रसाद (an essay on Indian culture: its unity, tolerance and continuity) 4. **अजन्ता** — भगवतशरण उपाध्याय (a description of the Ajanta caves — their art, history and beauty) 5. **क्या लिखूँ** — पदुमलाल पुन्नालाल बख्शी (an essay on the writer's dilemma — what to write, and why) 6. **ईर्ष्या तू न गयी मेरे मन से** — रामधारी सिंह दिनकर (an essay on jealousy: how it enters the mind and how it is overcome) 7. **पानी में चन्दा और चाँद पर आदमी** — जयप्रकाश भारती (science writing: the Moon seen from Earth, and man reaching the Moon)

Key points: Read each lesson for its central idea, the author's viewpoint, and 2–3 important lines you can quote. For the history of prose, remember the main periods and the forms that belong to each.

Practice questions: 1. What is the central idea of आचार्य रामचन्द्र शुक्ल's essay मित्रता? 2. In ममता, how does the mother show her love? Give two examples from the story. 3. According to डॉ. राजेन्द्र प्रसाद, what are the two most important qualities of भारतीय संस्कृति? 4. Describe the Ajanta caves in three sentences, based on अजन्ता. 5. Why does the writer in क्या लिखूँ find it hard to decide what to write? 6. What does दिनकर say is the way to overcome ईर्ष्या? 7. What two things does पानी में चन्दा और चाँद पर आदमी compare, and what is the point of the comparison?

Unit 2 — Poetry (पद्य) — 22 marks

What to learn: The history of Hindi poetry literature, the thirteen prescribed poets and their poems, one khand kavya (as per your district), and the elements of poetic beauty — Ras, Alankar and Chhand.

Poetry (13 poets, in syllabus order): 1. **सूरदास** — पद (devotional poetry on Krishna) 2. **तुलसीदास** — धनुष भंग, वन पथ पर (episodes from the Ramayana) 3. **रसखान** — सवैये, कवित्त (devotion to Krishna in Braj language) 4. **बिहारी लाल** — भक्ति नीति (couplets on devotion and conduct) 5. **रामनरेश त्रिपाठी** — स्वदेश प्रेम (love of the motherland) 6. **मैथिलीशरण गुप्त** — भारतमाता का मंदिर यह (the motherland as a temple) 7. **महादेवी वर्मा** — हिमालय से, वर्षा सुन्दरी के प्रति (nature poetry) 8. **सुमित्रानन्दन पन्त** — चींटी, चन्द्रलोक में प्रथम बार (nature and wonder) 9. **माखनलाल चतुर्वेदी** — पुष्प की अभिलाषा, जवानी (the flower's wish;

youth) 10. **सुभद्रा कुमारी चौहान** — झांसी की रानी की समाधि पर (tribute at the tomb of the Rani of Jhansi) 11. **अशोक वाजपेयी** — भाषा एकमात्र अनन्त है, युवा जंगल (language and the young forest) 12. **श्यामनारायण पाण्डेय** — हल्दीघाटी (the battle of Haldighati) 13. **केदारनाथ सिंह** — नदी (the river)

Khand Kavya (खण्ड काव्य) — 1 of 9 per district: मुक्तिदूत; ज्योति जवाहर; अग्रपूजा; मेवाड़ मुकुट; जय सुभाष; मातृ भूमि के लिये; कर्ण; कर्मवीर भरत; तुमुल. **Which one you study depends on your district** — the district-wise list is in the official syllabus. Never study a khand kavya title without checking your district's list.

Elements of poetic beauty (काव्य सौन्दर्य के तत्व): - **Ras (रस):** हास्य (humour), करुण (pathos) - **Alankar (अलंकार):** उपमा (simile), रूपक (metaphor), उत्प्रेक्षा (poetic fancy) - **Chhand (छन्द):** सोरठा, रोला

Practice questions: 1. What is the theme of सूरदास's पद? 2. In धनुष भंग, what happens when the bow breaks? 3. What does रसखान's poetry show about his devotion to Krishna? 4. State the central idea of भारतमाता का मंदिर यह. 5. What does the flower wish for in पुष्प की अभिलाषा? 6. Why does the poet visit झांसी की रानी की समाधि? 7. Give one example each of उपमा and रूपक from any prescribed poem. 8. Name the two Ras and the two Chhand in the syllabus.

Unit 3 — Sanskrit (संस्कृत खण्ड) — 14 marks

Sanskrit lessons (9, in syllabus order): वाराणसी; देशभक्तः चन्द्रशेखरः; भारतीयाः संस्कृतिः; वीरः वीरेण पूज्यते; आरूणिश्वेतकेतु संवादः; जीवन-सूत्राणि; प्रबुद्धोग्रामीणः; केन किं वर्धतेः; अन्योक्तिविलासः.

What to learn: Read each lesson for its meaning and moral — Varanasi's glory, the patriot Chandrashekhar, Indian culture, the brave honoured by the brave, the dialogue of Aruni and Shvetaketu, the sutras of life, the enlightened villager, what grows by what, and the beauty of indirect speech. Practise translating the lessons into Hindi.

Practice questions: 1. What does देशभक्तः चन्द्रशेखरः tell us about Chandrashekhar? 2. Translate any two lines from वाराणसी into Hindi. 3. What is the teaching of जीवन-सूत्राणि? 4. Who are आरूणि and श्वेतकेतु, and what do they discuss?

Unit 4 — Letter, Grammar and Essay (पत्र, व्याकरण, निबन्ध) — 18 marks

What to learn: Letter writing (formal and informal — 4 marks), grammar (7 marks) and essay writing (7 marks). Practise one letter and one essay every week. For grammar, revise sandhi, samas, upsarg-pratyay, and the parts of speech as taught in your textbook.

Practice questions: 1. Write a formal letter to your District Magistrate asking for a library in your village. 2. Write an informal letter to a friend describing your school's annual function. 3. Write a short essay (about 150 words) on "स्वच्छ भारत" or "मेरा प्रिय खेल". 4. Give two examples of उपमा and two of रूपक in Hindi sentences of your own.

Answer key — Hindi

- **Unit 1:** Q1 — True friendship is selfless, tested in difficulty, and based on character, not gain. Q2 — The mother's love shows in her sacrifice and in putting her child's welfare before her own (quote two incidents from the story). Q3 — Unity in diversity and tolerance / continuity of culture. Q4 — The Ajanta caves are ancient Buddhist rock-cut caves, famous for their paintings and sculpture. Q5 — Because every subject seems either too small or already written about. Q6 — By self-knowledge, contentment and goodwill towards others. Q7 — The Moon reflected in water vs man actually reaching the Moon; science turns imagination into reality.
- **Unit 2:** Q1 — Devotion to Krishna and the longing of the devotee. Q2 — The bow breaks and Sita's swayamvara is decided. Q3 — Deep, personal devotion expressed in simple Braj verse. Q4 — The motherland is a temple and serving her is worship. Q5 — The flower wishes to be offered at the feet of the motherland, not to fade unused. Q6 — To pay tribute to the Rani's sacrifice for the country. Q7–Q8 — Any correct example from the prescribed poems; Ras: हास्य, करुण; Chhand: सोरठा, रोला.
- **Unit 3:** Q1 — Chandrashekhar's fearlessness and love of the country. Q2–Q4 — As per the lesson text and its meaning.
- **Unit 4:** Marked on format, language and content as per the paper pattern.

Part B — English — Code 917

Exam: Wednesday 10 February 2027 (morning, 8:30–11:45 AM) | **Marks:** 70 theory + 30 internal = 100 | **Paper:** 17 numbered questions (Q1–Q17)

Prescribed texts: NCERT **First Flight** (prose + poetry) and **Footprints Without Feet** (supplementary reader). Workbook: **Words & Expression** (NCERT). Recommended (new in 2026-27): 'A Handbook of Grammar and Composition Writing', ELTI U.P., Prayagraj. Do **not** use the older "Breakdown A" texts sometimes listed by aggregators (The Enchanted Pool, The Ganga, Socrates, etc.) — they are not the prescribed texts for UP Board 2026-27.

Unit	What it covers	Marks
Unit 1 — Reading	Q1: unseen passage + 3 MCQs (3); Q2: unseen passage + 3 VSA + 1 vocabulary (7)	10
Unit 2 — Writing	Q3: letter / application (4); Q4: descriptive paragraph / report / article, 80–100 words (6)	10
Unit 3 — Grammar	Q5: 5 MCQs — parts of speech, tenses, articles, reordering, spellings (5); Q6: 3 VSA — narration, voice, punctuation (6); Q7: Hindi → English translation, 4 sentences (4)	15

Unit	What it covers	Marks
Unit 4 — Literature	First Flight 23 (prose 15 + poetry 8) + Footprints Without Feet 12	35
Total theory		**70**
Internal assessment	Oral test 10 (August) + Creative writing test 10 (December) + 4 unit tests → 10	**30**

Change in 2026-27: the long answer is now **60–80 words** (was 60 words).

Unit 1 — Reading — 10 marks

What to learn: Read an unseen passage quickly, find the main idea, and answer precisely. For Q1, the three MCQs test understanding of the passage. For Q2, the three very-short answers test detail, and the vocabulary question tests one word's meaning in context. Practise with one unseen passage a week, timing yourself.

Practice questions: 1. Read a newspaper paragraph of about 150 words. Write its main idea in one sentence. 2. Find three words in the paragraph whose meanings you can guess from context, and write what they mean. 3. Write three very-short-answer questions on the paragraph, and answer each in one line.

Unit 2 — Writing — 10 marks

What to learn: Q3 is a letter or an application (4 marks) — learn the format (sender's address, date, receiver, subject, salutation, body, closing). Q4 is a descriptive paragraph, report or article of 80–100 words (6 marks) — one clear idea, in order, in simple correct English.

Practice questions: 1. Write an application to your principal asking for leave of three days. 2. Write a letter to a friend describing a book you have recently read. 3. Write a paragraph (80–100 words) on "A Rainy Day". 4. Write a short report on your school's sports day.

Unit 3 — Grammar — 15 marks

What to learn: Q5 — parts of speech, tenses, articles, reordering jumbled words, spellings. Q6 — narration (direct/indirect speech), voice (active/passive), punctuation. Q7 — translate four Hindi sentences into English.

Key points: - **Tenses:** present simple for habits and facts; past simple for finished actions; present perfect for actions with present result. - **Articles:** "a/an" for one of many; "the" for a specific one; no article before plural nouns used generally. - **Voice:** active "Ram wrote a letter" → passive "A letter was written by Ram". - **Narration:** "He said, 'I am busy'" → "He said that he was busy" (present becomes past in reported speech).

Practice questions: 1. Fill in the articles: "___ sun rises in ___ east." / "She is ___ honest girl." 2. Change to passive voice: "The teacher praised the boy." / "They are building a bridge." 3. Change to indirect speech: "Ravi said, 'I will come tomorrow.'" 4. Reorder: "went / yesterday / to / market / she". 5. Translate into English: (a) वह रोज़ स्कूल जाता है। (b) मैंने कल एक किताब खरीदी।

Unit 4 — Literature — 35 marks

First Flight — Prose (15 marks)

Lessons (9, in syllabus order): 1. **A Letter to God** — G.L. Fuentes (Lencho writes to God for help after a hailstorm) 2. **Nelson Mandela: Long Walk to Freedom** — Nelson Mandela (the fight against apartheid and the meaning of freedom) 3. **Two Stories about Flying** — His First Flight (Liam O'Flaherty — a young seagull afraid to fly); Black Aeroplane (Frederick Forsyth — a pilot lost in a storm, helped by a strange aeroplane) 4. **From the Diary of Anne Frank** — Anne Frank (a young girl's diary in hiding during the war) 5. **Glimpses of India** — A Baker from Goa (Lucio Rodrigues); Coorg (Lokesh Abrol); Tea from Assam (Arup Kumar Datta) 6. **Mijbil the Otter** — Gavin Maxwell (an otter as a pet) 7. **Madam Rides the Bus** — Vallikkannan (a girl's first bus ride) 8. **The Sermon at Benares** — (the Buddha's sermon on suffering and death) 9. **The Proposal** — Anton Chekov (a comic proposal that turns into an argument)

Question pattern: Q8: 2 MCQs from an extract; Q9: 3 MCQs from the lessons; Q10: 2 short answers, 30–40 words; Q11: 1 long answer, 60–80 words.

First Flight — Poetry (8 marks)

Poems (10, in syllabus order): Dust of Snow (Robert Frost); Fire and Ice (Robert Frost); A Tiger in the Zoo (Leslie Norris); How to Tell Wild Animals (Carolyn Wells); The Ball Poem (John Berryman); Amanda! (Robin Klein); The Trees (Adrienne Rich); Fog (Carl Sandburg); The Tale of Custard the Dragon (Ogden Nash); For Anne Gregory (W.B. Yeats).

Question pattern: Q12: 2 MCQs from an extract; Q13: 1 short answer, 30–40 words, OR four lines from any prescribed poem; Q14: central idea of a poem (3 marks).

Footprints Without Feet (12 marks)

Lessons (9, in syllabus order): A Triumph of Surgery (James Herriot); The Thief's Story (Ruskin Bond); The Midnight Visitor (Robert Arthur); A Question of Trust (Victor Canning); Footprints Without Feet (H.G. Wells); The Making of a Scientist (Robert W. Peterson); The Necklace (Guy De Maupassant); Bholi (K.A. Abbas); The Book That Saved the Earth (Claire Boiko).

Question pattern: Q15: 5 MCQs; Q16: 1 short answer; Q17: 1 long answer, 60–80 words.

Practice questions: 1. Why did Lencho write a letter to God? What happened to his crop? 2. What, according to Mandela, is the true meaning of freedom? 3. How did the young seagull overcome his fear of flying? 4. What does Anne Frank write about her life in hiding? 5. Describe

Coorg in three sentences. 6. Why did Mijbil like playing with water? 7. What did Valli learn from her first bus ride? 8. What is the central idea of The Ball Poem? 9. How is Custard different from the other animals in the poem? 10. In The Necklace, what did Matilda lose, and what did it cost her? 11. How did Bholi change from a timid girl into a confident young woman? 12. How did a book save the Earth in The Book That Saved the Earth?

Answer key — English

- **Unit 1:** Answers depend on the passage chosen — check main idea, detail and word meaning against the passage.
- **Unit 2:** Marked on format (letter), content, organisation and correct English.
- **Unit 3:** Q1 — "The sun rises in the east." / "She is an honest girl." Q2 — "The boy was praised by the teacher." / "A bridge is being built by them." Q3 — "Ravi said that he would come the next day." Q4 — "She went to the market yesterday." Q5 — (a) "He goes to school every day." (b) "I bought a book yesterday."
- **Unit 4:** Q1 — A hailstorm destroyed Lencho's cornfield; he wrote to God asking for a hundred pesos. Q2 — Freedom means being able to live with dignity, and also respecting the freedom of others. Q3 — Hunger forced him to dive, and then he found he could fly. Q4 — She writes about fear, boredom, quarrels and hope in the secret annexe. Q5 — Coorg is a coffee-growing hill district in Karnataka, known for its rain, martial people and beauty. Q6 — Otters love water; Mijbil played in it for hours. Q7 — She learned about life and death, and that the world is bigger than her village. Q8 — Losing something dear teaches us to accept loss and move on. Q9 — Custard is a cowardly dragon who turns out to be the bravest of all when danger comes. Q10 — She lost the borrowed diamond necklace; replacing it cost ten years of hard labour. Q11 — Education and her teacher's encouragement gave her confidence; she refused to marry a greedy man. Q12 — The Martians misread a book of nursery rhymes and fled, thinking Earth people were powerful.

Part C — Mathematics (गणित) — Code 928

Exam: Saturday 13 February 2027 | **Marks:** 70 theory + 30 project = 100 | **Pass:** 23 written + 10 internal = 33

Prescribed textbook: NCERT Mathematics textbook (UPMSP-prescribed, NCERT-aligned). Project booklet: **भारत का परम्परागत गणित ज्ञान** (Traditional Mathematical Knowledge of India — compulsory project source, item 12).

Unit	Topics (in syllabus order)	Marks
Unit 1 — Number Systems (संख्या पद्धति)	Real Numbers	5

Unit	Topics (in syllabus order)	Marks
Unit 2 — Algebra (बीजगणित)	Polynomials; Pair of Linear Equations in Two Variables; Quadratic Equations; Arithmetic Progressions	18
Unit 3 — Coordinate Geometry (निर्देशांक ज्यामिति)	Lines in two dimensions	5
Unit 4 — Geometry (ज्यामिति)	Triangles; Circles	10
Unit 5 — Trigonometry (त्रिकोणमिति)	Introduction to Trigonometry; Trigonometric Identities; Heights and Distances	12
Unit 6 — Mensuration (क्षेत्रमिति)	Areas Related to Circles; Surface Areas and Volumes	10
Unit 7 — Statistics & Probability (सांख्यिकी और प्रायिकता)	Statistics; Probability	10
Total theory	15 topics	**70**
Internal assessment	Project + oral quiz (5+5) in August + project + practice-book record (5+5) in December + 4 unit tests → 10	**30**

Projects: any ONE project from list items 1–11 + ONE compulsory project from item 12 (the booklet भारत का परम्परागत गणित ज्ञान). The full project list (items 1–11) is taken from the official PDF at build time.

Unit 1 — Number Systems — 5 marks

What to learn: Real numbers and the Fundamental Theorem of Arithmetic (every composite number can be expressed as a product of primes, uniquely). Proving that √2, √3 and √5 are irrational.

Key points: HCF × LCM = product of the two numbers (for two positive integers). √2 is irrational — proved by contradiction (if √2 = p/q in lowest terms, both p and q would be even).

Practice questions: 1. Find the HCF and LCM of 12 and 18 by prime factorisation. 2. Prove that √3 is irrational. 3. Show that 5√2 is irrational.

Unit 2 — Algebra — 18 marks

What to learn: Polynomials (zeroes and their geometrical meaning; relation between zeroes and coefficients for quadratics); pair of linear equations in two variables (graphical, substitution and elimination methods); quadratic equations (real roots only, quadratic formula, factorisation, discriminant and the nature of roots, daily-life applications); arithmetic progressions (nth term, sum of first n terms).

Key points: - For a quadratic $ax^2 + bx + c$: sum of zeroes = $-b/a$; product of zeroes = c/a. - Discriminant $D = b^2 - 4ac$: $D > 0$ → two distinct real roots; $D = 0$ → two equal roots; $D < 0$ → no real roots. - Quadratic formula: $x = [-b \pm \sqrt{(b^2 - 4ac)}] / 2a$. - AP: nth term $a_n = a + (n-1)d$; sum $S_n = n/2 \times [2a + (n-1)d] = n/2 \times$ (first + last term). - A pair of linear equations has: one solution (intersecting lines), no solution (parallel lines), or infinitely many solutions (coincident lines).

Practice questions: 1. Find the zeroes of $x^2 - 5x + 6$ and verify the relation with the coefficients. 2. Solve by elimination: $2x + 3y = 7$; $x - y = 1$. 3. Find the roots of $x^2 - 7x + 12 = 0$ by factorisation. 4. Find the discriminant of $2x^2 - 4x + 3 = 0$ and state the nature of its roots. 5. The 5th term of an AP is 11 and the 9th term is 19. Find the first term and the common difference. 6. Find the sum of the first 20 natural numbers.

Unit 3 — Coordinate Geometry — 5 marks

What to learn: Lines in two dimensions — graphs of linear equations, the distance formula and the section formula (internal division).

Key points: Distance between (x_1, y_1) and $(x_2, y_2) = \sqrt{[(x_2-x_1)^2 + (y_2-y_1)^2]}$. Section formula: a point dividing the segment joining (x_1, y_1) and (x_2, y_2) in the ratio m:n is $((mx_2+nx_1)/(m+n), (my_2+ny_1)/(m+n))$. Midpoint: $((x_1+x_2)/2, (y_1+y_2)/2)$.

Practice questions: 1. Find the distance between (2, 3) and (6, 6). 2. Find the midpoint of the line joining (1, 5) and (7, 3). 3. Find the point that divides the segment joining A(4, 2) and B(8, 10) in the ratio 1:3.

Unit 4 — Geometry — 10 marks

What to learn: Triangles — similar triangles and their 5 results (including the Basic Proportionality Theorem). Circles — tangent, point of contact, and 3 results, including the number of tangents from a point. **There is NO Constructions chapter in the 2026-27 syllabus.**

Key points: Similar triangles have equal corresponding angles and proportional corresponding sides. The Basic Proportionality Theorem: a line parallel to one side of a triangle divides the other two sides proportionally. A tangent to a circle is perpendicular to the radius at the point of contact. From an external point, exactly two tangents can be drawn to a circle, and they are equal in length.

Practice questions: 1. In a triangle ABC, a line parallel to BC meets AB at D and AC at E. If AD = 2 cm, DB = 4 cm and AE = 3 cm, find EC. 2. State and prove (or use) the Basic Proportionality Theorem. 3. A tangent at a point P of a circle of radius 5 cm meets a line through the centre O at Q, with OQ = 13 cm. Find the length of PQ. 4. From a point 10 cm from the centre of a circle of radius 6 cm, find the length of the tangent.

Unit 5 — Trigonometry — 12 marks

What to learn: Introduction to trigonometry (ratios, values at 0°/30°/45°/60°/90°); trigonometric identities (for $0° \le \theta < 90°$); heights and distances (angles of elevation and depression, only 30°/45°/60°, at most 2 right triangles).

Key points: $\sin^2\theta + \cos^2\theta = 1$; $1 + \tan^2\theta = \sec^2\theta$; $1 + \cot^2\theta = \text{cosec}^2\theta$. Values: $\sin 30° = 1/2$, $\cos 30° = \sqrt{3}/2$, $\tan 45° = 1$, $\sin 90° = 1$, $\cos 90° = 0$.

Practice questions: 1. Find the value of $\sin 60° \cos 30° + \cos 60° \sin 30°$. 2. Prove: $(1 + \tan^2\theta) = \sec^2\theta$. 3. If $\tan\theta = 3/4$, find $\sin\theta$ and $\cos\theta$. 4. A tower is 30 m high. Find the length of its shadow when the sun's elevation is 45°. 5. From the top of a 20 m building, the angle of depression of a point on the ground is 30°. Find the distance of the point from the building.

Unit 6 — Mensuration — 10 marks

What to learn: Areas related to circles (sector, segment); surface areas and volumes (combining any two of cube, cuboid, sphere, hemisphere, right circular cylinder and cone; mixed questions use at most 2 kinds of solids).

Key points: Area of a sector (angle θ) = $\theta/360 \times \pi r^2$; length of arc = $\theta/360 \times 2\pi r$. Volume of a cylinder = $\pi r^2 h$; sphere = $4/3\pi r^3$; hemisphere = $2/3\pi r^3$; cone = $1/3\pi r^2 h$. Surface area of a sphere = $4\pi r^2$.

Practice questions: 1. Find the area of a sector of a circle of radius 7 cm with central angle 60°. 2. A solid is a cylinder of radius 3 cm and height 7 cm with a hemispherical end. Find its total surface area. 3. Find the volume of a cone of radius 7 cm and height 24 cm. 4. A sphere of radius 6 cm is melted and recast into a cylinder of radius 3 cm. Find the height of the cylinder.

Unit 7 — Statistics & Probability — 10 marks

What to learn: Statistics (mean, median, mode of grouped data); probability (theoretical definition, single event).

Key points: Mean of grouped data = $\Sigma f_i x_i / \Sigma f_i$. Median class is found from the cumulative frequency. Mode = 3 × median − 2 × mean (empirical relation). Probability of an event = (number of favourable outcomes) / (total number of outcomes); it lies between 0 and 1.

Practice questions: 1. Find the mean of: 5, 8, 12, 15, 20. 2. A die is thrown once. Find the probability of getting an even number. 3. A bag has 3 red and 5 blue balls. One ball is drawn at random. Find the probability that it is red. 4. Find the median of: 2, 4, 6, 8, 10, 12, 14.

Answer key — Mathematics

- **Unit 1:** Q1 — HCF 6, LCM 36. Q2 — Standard contradiction proof: if $\sqrt{3} = p/q$ in lowest terms, then $p^2 = 3q^2$, so 3 divides p and q — contradiction. Q3 — If $5\sqrt{2}$ were rational, $\sqrt{2}$ would be rational — contradiction.
- **Unit 2:** Q1 — Zeroes 2 and 3; sum 5 = −(−5)/1, product 6 = 6/1. Q2 — x = 2, y = 1. Q3 — x = 3 or x = 4. Q4 — D = 16 − 24 = −8 < 0, so no real roots. Q5 — a = 3, d = 2. Q6 — 210.
- **Unit 3:** Q1 — 5 units. Q2 — (4, 4). Q3 — (5, 4).
- **Unit 4:** Q1 — EC = 6 cm. Q3 — PQ = 12 cm ($13^2 - 5^2 = 144$). Q4 — 8 cm ($10^2 - 6^2 = 64$).
- **Unit 5:** Q1 — 1. Q3 — $\sin\theta = 3/5$, $\cos\theta = 4/5$. Q4 — 30 m. Q5 — $20\sqrt{3}$ m ≈ 34.64 m.
- **Unit 6:** Q1 — 77/3 cm^2 ≈ 25.67 cm^2. Q2 — $2\pi \times 3 \times (7 + 3) = 60\pi$ cm^2 ≈ 188.5 cm^2 (cylinder curved surface + hemisphere). Q3 — 1,232 cm^3. Q4 — $h = (4/3 \times \pi \times 216) / (\pi \times 9) = 32$ cm.
- **Unit 7:** Q1 — 12. Q2 — 1/2. Q3 — 3/8. Q4 — 8.

Part D — Science (विज्ञान) — Code 931

Exam: Wednesday 17 February 2027 | **Marks:** 70 theory + 30 practical = 100 | **Pass:** 23 written + 10 internal = 33

Prescribed textbook: NCERT Science textbook. **Science is one of only TWO Class 10 subjects with board-conducted practicals** (the other is Home Science) — external examiner, CCTV mandatory, recordings preserved.

Unit	Chapters (in syllabus order)	Marks
Unit 1 — Chemical Substances: Nature and Behaviour (रासायनिक पदार्थ)	Chemical Reactions and Equations; Acids, Bases and Salts; Metals and Non-metals; Carbon and its Compounds	20
Unit 2 — World of Living (जैव जगत)	Life Processes; Control and Coordination; How do Organisms Reproduce?; Heredity	20
Unit 3 — Natural Phenomena (प्राकृतिक घटनाएँ)	Light: Reflection and Refraction; The Human Eye and the Colourful World	12
Unit 4 — Effects of Current (विद्युत धारा के प्रभाव)	Electricity; Magnetic Effects of Electric Current	13
Unit 5 — Natural Resources (प्राकृतिक संसाधन)	Our Environment	5
Total theory	13 chapters	**70**
Practical + internal	External practical 15 (3 experiments — one each Physics / Chemistry / Biology, 4 each + viva 3) + internal 15 (3 projects × 3 + term work 6)	**30**

13 chapters ONLY. The following are **NOT in the syllabus** (dropped in the rationalised NCERT syllabus UP Board follows): Periodic Classification of Elements, Sources of Energy, Management of Natural Resources, Evolution. Do not study them for this exam.

Practical work: 15 experiments + 18 projects prescribed. The full experiment and project lists are taken from the official PDF at build time.

Unit 1 — Chemical Substances: Nature and Behaviour — 20 marks

Chemical Reactions and Equations

What to learn: What a chemical reaction is, how to write and balance a chemical equation, and the types of reactions — combination, decomposition, displacement, double displacement, oxidation and reduction.

Key points: A balanced equation has the same number of atoms of each element on both sides. In a displacement reaction a more reactive element takes the place of a less reactive one. Corrosion (rusting of iron) and rancidity are everyday oxidation.

Acids, Bases and Salts

What to learn: Properties of acids and bases, the pH scale, and common salts — their preparation and uses.

Key points: Acids turn blue litmus red; bases turn red litmus blue. pH below 7 is acidic, 7 is neutral, above 7 is basic. Common salt is sodium chloride; washing soda is sodium carbonate; baking soda is sodium hydrogen carbonate; bleaching powder is calcium oxychloride; plaster of Paris is calcium sulphate hemihydrate.

Metals and Non-metals

What to learn: Physical and chemical properties of metals and non-metals, the reactivity series, extraction of metals, and corrosion.

Key points: Metals are lustrous, malleable, ductile and good conductors. Reactivity order (part): potassium > sodium > calcium > magnesium > aluminium > zinc > iron > lead > hydrogen > copper > silver > gold. Ionic compounds have high melting points and conduct electricity in molten state or in solution.

Carbon and its Compounds

What to learn: Bonding in carbon compounds, covalent bonds, saturated and unsaturated hydrocarbons, and the main carbon compounds — ethanol and ethanoic acid — with soaps and detergents.

Key points: Carbon forms covalent bonds and shows catenation (chains). Ethanol is used as a fuel and solvent; ethanoic acid (vinegar) is used in food and in making esters. Soaps are sodium salts of fatty acids; detergents work better in hard water.

Practice questions: 1. Balance: $Fe + H_2O \rightarrow Fe_3O_4 + H_2$. 2. What is the pH of a neutral solution? Name one acid and one base found at home. 3. Why is sodium kept in kerosene? 4. Arrange in order of reactivity: iron, zinc, copper, aluminium. 5. What is the difference between a saturated and an unsaturated hydrocarbon? 6. Write two uses of ethanol and two of ethanoic acid. 7. Why does soap not work well in hard water?

Unit 2 — World of Living — 20 marks

Life Processes

What to learn: Nutrition (autotrophic and heterotrophic), respiration, transportation in plants and animals, and excretion.

Key points: Photosynthesis: $6CO_2 + 12H_2O \rightarrow C_6H_{12}O_6 + 6O_2 + 6H_2O$ (in sunlight, with chlorophyll). In humans, the heart has four chambers; blood flows through arteries (away from the heart) and veins (towards it). The kidneys filter blood and form urine; nephrons are the filtering units.

Control and Coordination

What to learn: The nervous system and reflex action in animals, and coordination in plants (tropisms and plant hormones).

Key points: The reflex arc is: receptor → sensory neuron → spinal cord → motor neuron → effector. Plant hormones: auxin (cell elongation), gibberellin (stem growth), cytokinin (cell division), abscisic acid (dormancy, closing stomata). In humans, the pituitary, thyroid, pancreas, adrenals and gonads are endocrine glands; insulin controls blood sugar.

How do Organisms Reproduce?

What to learn: Asexual reproduction (fission, budding, fragmentation, regeneration, vegetative propagation, spore formation) and sexual reproduction in plants and animals.

Key points: In flowering plants, pollination is followed by fertilisation, forming seeds. In humans, fertilisation happens in the fallopian tube and the embryo develops in the uterus. Vegetative propagation uses parts like stem, root and leaf (e.g., potato eyes, Bryophyllum leaves).

Heredity

What to learn: Mendel's laws, dominant and recessive traits, sex determination, and how traits are inherited.

Key points: Mendel's monohybrid cross (TT × tt) gives 3:1 in the F2 generation (3 tall : 1 dwarf). In humans, sex is determined by the father: XX = girl, XY = boy. Acquired traits are not inherited; variation is the basis of evolution.

Practice questions: 1. Write the equation of photosynthesis. 2. What is the function of the nephron? 3. Draw and label the reflex arc. 4. Name two plant hormones and one function of each. 5. What is vegetative propagation? Give two examples. 6. In a monohybrid cross of pure tall and pure dwarf pea plants, what is the F2 ratio? 7. Who determines the sex of a child — mother or father? Explain.

Unit 3 — Natural Phenomena — 12 marks

Light: Reflection and Refraction

What to learn: Reflection and refraction of light, mirrors and lenses, their formulae, and the power of a lens.

Key points: Laws of reflection: angle of incidence = angle of reflection. Refractive index n = speed of light in vacuum / speed in the medium. Mirror formula: 1/v + 1/u = 1/f. Lens formula: 1/v − 1/u = 1/f. Magnification m = height of image / height of object = v/u (mirror sign conventions apply). Power of a lens P = 1/f (f in metres), measured in dioptres.

The Human Eye and the Colourful World

What to learn: The human eye, defects of vision and their correction, and the colours of the sky — dispersion, scattering, refraction through a prism, and the rainbow.

Key points: Myopia (short sight) is corrected with a concave lens; hypermetropia (long sight) with a convex lens. The sky is blue because of the scattering of light by tiny particles. The sun appears red at sunrise and sunset because blue light is scattered away. A rainbow forms by dispersion, refraction and internal reflection in raindrops.

Practice questions: 1. State the laws of reflection. 2. An object is placed 20 cm from a concave mirror of focal length 10 cm. Where is the image formed? 3. What is the power of a lens of focal length 25 cm? 4. How is myopia corrected? Which lens is used? 5. Why does the sky appear blue?

Unit 4 — Effects of Current — 13 marks

Electricity

What to learn: Electric current, potential difference, resistance, Ohm's law, series and parallel circuits, and the heating effect of current (including electric power).

Key points: Ohm's law: $V = IR$. Resistance in series: $R = R_1 + R_2 + \ldots$; in parallel: $1/R = 1/R_1 + 1/R_2 + \ldots$. Electric power $P = VI = I^2R = V^2/R$, measured in watts. Heating effect: $H = I^2Rt$. 1 kWh = 3.6×10^6 J (one unit of electricity).

Magnetic Effects of Electric Current

What to learn: Magnetic field around a current-carrying conductor, the solenoid and electromagnet, Fleming's left-hand rule, the electric motor, electromagnetic induction and Fleming's right-hand rule, and the domestic electric circuit.

Key points: A current-carrying straight wire produces concentric circular magnetic field lines. The right-hand thumb rule gives the field direction. Fleming's left-hand rule: forefinger = field, middle finger = current, thumb = force (motor). Fleming's right-hand rule is for induced current (generator). In domestic wiring, the live wire is red, neutral is black, earth is green; the fuse protects the circuit.

Practice questions: 1. State Ohm's law. A current of 2 A flows through a resistance of 5 Ω. Find the voltage. 2. Two resistances 4 Ω and 6 Ω are in parallel. Find the equivalent resistance. 3. An electric bulb is marked 100 W, 220 V. Find its resistance. 4. State Fleming's left-hand rule. 5. What is the colour of the live wire in domestic wiring, and what does the fuse do?

Unit 5 — Natural Resources — 5 marks

Our Environment

What to learn: Ecosystems and their components, food chains and food webs, and how human activities affect the environment — ozone depletion and waste management.

Key points: A food chain shows who eats whom; energy flows from producers to consumers, and only about 10% of energy passes to the next trophic level. Ozone (O_3) in the stratosphere absorbs ultraviolet rays; chlorofluorocarbons (CFCs) damage it. Biodegradable waste rots; non-biodegradable waste (plastics) does not — reduce, reuse, recycle.

Practice questions: 1. What is a food chain? Give an example with four trophic levels. 2. Why does only about 10% of energy pass to the next trophic level? 3. What damages the ozone layer, and why does it matter? 4. Give two examples each of biodegradable and non-biodegradable waste.

Answer key — Science

- **Unit 1:** Q1 — $3Fe + 4H_2O \rightarrow Fe_3O_4 + 4H_2$. Q2 — pH 7; acid: vinegar/lemon juice; base: baking soda/soap solution. Q3 — Sodium reacts violently with air and water, so it is stored under kerosene. Q4 — Aluminium > zinc > iron > copper. Q5 — Saturated hydrocarbons have only single bonds; unsaturated have double or triple bonds. Q6 — Ethanol: fuel, solvent/medicine; ethanoic acid: vinegar, making esters. Q7 — Hard water has calcium/magnesium salts that form insoluble scum with soap.
- **Unit 2:** Q1 — $6CO_2 + 12H_2O \rightarrow C_6H_{12}O_6 + 6O_2 + 6H_2O$. Q2 — It filters blood and forms urine. Q3 — Receptor → sensory neuron → spinal cord → motor neuron → muscle (effector). Q4 — Auxin: cell elongation; gibberellin: stem growth; cytokinin: cell division; abscisic acid: closing stomata. Q5 — New plants from vegetative parts: potato eyes, Bryophyllum leaf buds. Q6 — 3 tall : 1 dwarf. Q7 — The father: the child is a girl if it gets an X chromosome from the father, a boy if it gets a Y.
- **Unit 3:** Q1 — The incident ray, reflected ray and normal lie in one plane; angle of incidence = angle of reflection. Q2 — At 20 cm in front of the mirror ($v = -20$ cm; image is real, inverted, same size). Q3 — $P = 1/0.25 = +4$ D. Q4 — With a concave lens (diverging lens). Q5 — Short-wavelength blue light is scattered most by air particles.
- **Unit 4:** Q1 — $V = IR = 10$ V. Q2 — 2.4 Ω. Q3 — $R = V^2/P = 484$ Ω. Q4 — Forefinger: magnetic field; middle finger: current; thumb: force/motion. Q5 — Live wire is red; the fuse melts and breaks the circuit when current exceeds the safe limit.
- **Unit 5:** Q1 — E.g., grass → grasshopper → frog → snake. Q2 — Most energy is lost as heat, in movement and in life processes at each level. Q3 — CFCs break down ozone; the ozone layer blocks harmful UV rays. Q4 — Biodegradable: vegetable peels, paper; non-biodegradable: plastic bags, glass bottles.

Part E — Social Science (सामाजिक विज्ञान) — Code 932

Exam: Monday 8 February 2027 | **Marks:** 70 theory + 30 project/internal = 100

Prescribed textbooks (NCERT): History — India and the Contemporary World II; Geography — Contemporary India II; Civics — Democratic Politics II; Economics — Understanding Economic Development. UP Board follows NCERT with its own reduced chapter set and unit marks (below).

Unit	Chapters (in syllabus order)	Marks
Unit 1 — History (इतिहास)	Section 1 (8): The Rise of Nationalism in Europe; Nationalism in India. Section 2 (7): The Making of a Global World; The Age of Industrialisation. Section 3 (no separate marks): Print Culture and the Modern World. Map work (5)	20
Unit 2 — Geography (भूगोल)	Unit 1 (9): Resources and Development; Forest and Wildlife Resources; Water Resources; Agriculture. Unit 2 (6): Minerals and Energy Resources; Manufacturing Industries; Lifelines of National Economy. Map work (5)	20
Unit 3 — Civics (नागरिक शास्त्र)	Unit 1 (9): Power Sharing; Federalism; Caste, Religion and Gender Issues. Unit 2 (6): Political Parties; Outcomes of Democracy	15
Unit 4 — Economics (अर्थशास्त्र)	Unit 1 (9): Development; Sectors of the Indian Economy; Money and Credit. Unit 2 (6): Globalisation and the Indian Economy; Consumer Rights	15
Total theory	22 chapters + map work	**70**
Project / internal assessment	Project work / internal assessment (30-mark component — confirm the details against the official PDF at build time)	**30**

Unit 1 — History — 20 marks

Section 1 — The Rise of Nationalism in Europe; Nationalism in India (8 marks)

What to learn: How nationalism grew in Europe — the French Revolution, the making of nation-states, and the unification of Germany and Italy. Then nationalism in India — the Non-cooperation Movement, the Civil Disobedience Movement, and the role of Mahatma Gandhi.

Key points: The French Revolution (1789) gave the ideas of liberty, equality and fraternity. Germany was unified under Bismarck; Italy under Mazzini, Garibaldi and Cavour. In India: the Rowlatt Act (1919) and the Jallianwala Bagh massacre led to the Non-cooperation Movement (1920–22); the Salt March (1930) began Civil Disobedience; the Quit India Movement came in 1942.

Section 2 — The Making of a Global World; The Age of Industrialisation (7 marks)

What to learn: How trade, migration and colonisation made the modern world economy, and how industrialisation began in Britain and spread — including the growth of factories and the condition of workers.

Key points: The Silk Routes connected Asia and Europe for centuries. The nineteenth century saw mass migration (including indentured labour) and the flow of goods, capital and ideas. Industrialisation started with textiles in Britain; in India, the first cotton mill was in Bombay

(1854) and the first jute mill near Calcutta (1855).

Section 3 — Print Culture and the Modern World (no separate marks)

What to learn: How printing began in Europe (Gutenberg), how it spread to India, and how print changed reading, religion and politics.

Key points: Gutenberg's press (mid-1400s) made books cheap. In India, print helped reformers and nationalists reach the people, and it also carried the debate about women's education and caste.

Map work (5 marks): INC sessions — Calcutta (September 1920), Nagpur (December 1920), Madras (1927), Lahore (1929) — and the sites of Nationalism in India. Practise marking these on an outline map of India.

Practice questions: 1. What ideas did the French Revolution give to the idea of the nation? 2. Why did Gandhi launch the Non-cooperation Movement? 3. What was the Salt March, and what did it achieve? 4. Name two factors that made the nineteenth-century world "global". 5. Where was the first cotton mill in India set up, and when? 6. How did print help the national movement in India?

Unit 2 — Geography — 20 marks

Unit 1 — Resources and Development; Forest and Wildlife Resources; Water Resources; Agriculture (9 marks)

What to learn: Types of resources and their development; forests and wildlife and their conservation; water resources and rainwater harvesting; agriculture — its types, major crops and food security.

Key points: Resources are renewable or non-renewable. India has 33% forest cover as a target; the Wildlife Protection Act (1972) protects animals. Major crops: rice and wheat (food crops); cotton and jute (fibre crops); tea and coffee (plantation crops). The Green Revolution raised food production but also raised the use of fertilisers and water.

Unit 2 — Minerals and Energy Resources; Manufacturing Industries; Lifelines of National Economy (6 marks)

What to learn: Major minerals and where they are found; energy resources — conventional (coal, petroleum) and non-conventional (solar, wind); manufacturing industries (iron and steel, textiles, IT); and transport and communication — the lifelines of the economy.

Key points: Iron ore is found in Odisha, Jharkhand, Chhattisgarh and Karnataka. Coal is the main energy source; solar and wind power are growing fast. The textile industry is India's oldest and largest manufacturing industry. National highways, railways, ports and airways

connect the country.

Map work (5 marks): Mark the major dams, mineral areas, industrial centres and ports from chapters 1–7 on an outline map of India.

Practice questions: 1. What is the difference between renewable and non-renewable resources? Give two examples of each. 2. Why is rainwater harvesting important in India? 3. Name the three cropping seasons of India and one crop of each. 4. Which states are rich in iron ore? 5. Name two non-conventional sources of energy and one advantage of each. 6. Why is the textile industry important for India?

Unit 3 — Civics — 15 marks

5 chapters ONLY. The following are **NOT in the UP Board syllabus** — Democracy and Diversity, Popular Struggles and Movements, Challenges to Democracy. Do not study them for this exam.

Unit 1 — Power Sharing; Federalism; Caste, Religion and Gender Issues (9 marks)

What to learn: Why power is shared in a democracy (horizontal and vertical sharing); how federalism works in India (Union, State and local lists; the three-tier system); and how caste, religion and gender shape politics.

Key points: Power is shared among the legislature, executive and judiciary, and among different levels of government. The Union List, State List and Concurrent List divide subjects between the Centre and the States. Panchayati Raj gives power to local government; one-third of seats are reserved for women. Caste and religion influence politics, but the Constitution forbids discrimination on their basis.

Unit 2 — Political Parties; Outcomes of Democracy (6 marks)

What to learn: What political parties are, the national and state parties of India, and what democracy delivers — accountable government, economic growth, dignity and freedom.

Key points: India has a multi-party system. National parties include the BJP, Congress, BSP, CPI(M) and others; state parties include the SP, DMK, AITC and others. Democracy is judged by whether it is accountable, responsive, and treats citizens with dignity.

Practice questions: 1. What is the difference between horizontal and vertical sharing of power? 2. Name two subjects each in the Union List and the State List. 3. What is Panchayati Raj? What reservation do women get in it? 4. How does caste influence Indian politics? Give one example. 5. Name two national parties and two state parties of India. 6. What are the expected outcomes of a democracy?

Unit 4 — Economics — 15 marks

Unit 1 — Development; Sectors of the Indian Economy; Money and Credit (9 marks)

What to learn: What development means (beyond income — health, education, freedom); the three sectors of the economy (primary, secondary, tertiary) and how they have changed; and money and credit — banks, loans and self-help groups.

Key points: Development is measured by per capita income and by the Human Development Index (health, education, income). The tertiary (service) sector is now the largest in India. Money is a medium of exchange; banks take deposits and give loans; self-help groups (SHGs) help the rural poor get credit.

Unit 2 — Globalisation and the Indian Economy; Consumer Rights (6 marks)

What to learn: What globalisation is, how multinational companies work, and the rights of consumers under the Consumer Protection Act.

Key points: Globalisation is the integration of economies through trade, investment and technology. The WTO (World Trade Organisation) sets the rules of world trade. Consumer rights include the right to safety, information, choice and redressal; the Consumer Protection Act, 2019, gives consumers legal protection.

Practice questions: 1. Why is per capita income alone not enough to measure development? 2. Which sector of the Indian economy is the largest today, and why? 3. What is a self-help group? How does it help the rural poor? 4. What is globalisation? Name one advantage and one disadvantage. 5. List four consumer rights under the Consumer Protection Act.

Answer key — Social Science

- **History:** Q1 — Liberty, equality, fraternity, and the idea that the people are sovereign. Q2 — The Rowlatt Act, the Jallianwala Bagh massacre, and the Khilafat issue. Q3 — Gandhi marched to Dandi (1930) and broke the salt law; it made the movement a mass movement. Q4 — Trade, migration of labour, and the flow of capital and ideas. Q5 — Bombay, 1854 (cotton mill). Q6 — Newspapers, pamphlets and books spread nationalist ideas, debated reform, and reached people in many languages.
- **Geography:** Q1 — Renewable: sunlight, wind; non-renewable: coal, petroleum. Q2 — Groundwater is falling and rainfall is uneven; harvesting stores rain for dry months. Q3 — Kharif (rice), Rabi (wheat), Zaid (watermelon/vegetables). Q4 — Odisha, Jharkhand, Chhattisgarh, Karnataka. Q5 — Solar: no fuel cost, no pollution; wind: clean and free, where wind is strong. Q6 — It is the oldest and largest manufacturing industry, employs millions, and earns foreign exchange.

- **Civics:** Q1 — Horizontal: among legislature, executive, judiciary; vertical: among Union, State and local governments. Q2 — Union: defence, foreign affairs; State: police, agriculture. Q3 — Local self-government in villages; one-third of seats reserved for women. Q4 — Caste groups vote together and parties choose candidates by caste; e.g., caste-based mobilisation in elections. Q5 — National: BJP, Congress; state: SP, DMK (any two correct). Q6 — Accountable and responsive government, economic development, and dignity and freedom for citizens.
- **Economics:** Q1 — It hides inequality and ignores health and education. Q2 — The tertiary (service) sector, because of IT, trade, transport and services. Q3 — A small group of rural poor (usually women) who save together and take small loans; it gives credit without collateral. Q4 — Integration of economies through trade and investment; advantage: more choice and jobs; disadvantage: small producers face hard competition. Q5 — Right to safety, information, choice, redressal (any four).

Part F — Optional Subject (Choose ONE)

Read this first: Every student takes **one** optional subject in addition to the five compulsory subjects. This Part covers each optional subject as a self-contained section — study only the one you have chosen. Whether the book carries all optional subjects in one copy or one optional subject per copy is a format decision for Kamal (see BUILD-TIME CHECKS).

F1 — Sanskrit (संस्कृत) — Code 923

Exam: Monday 15 February 2027 | **Marks:** 70 theory + 30 internal = 100

Prescribed books (4, board-prescribed): संस्कृत व्याकरण; संस्कृत गद्य भारती; संस्कृत पद्य पीयूषम्; संस्कृत कथा नाटक कौमुदी.

Section	What it covers	Marks
Section A (खण्ड-अ)	Prose (गद्य) 11: Hindi translation 4 + lesson summary 4 + MCQ 3. Verse (पद्य) 15: shloka explanation in Hindi 4 + sukti explanation in Hindi 3 + shloka meaning in Sanskrit 4 + MCQ 4. Rapid reading (द्रुत पाठ) 9: character sketch in Hindi 4 + short-answer questions in Sanskrit 2 + MCQ 3	35
Section B (खण्ड-ब)	Grammar (व्याकरण) 17: pratyaharas 2, sandhi 2, noun forms 2, verb forms 2, compounds 2, karak-vibhakti 2, suffixes 2, change of voice 3. Translation (अनुवाद) 6: 3 Hindi sentences into Sanskrit. Composition (रचना) 12: Sanskrit essay of at least 8 sentences 8 + using Sanskrit words in sentences 4	35
Total theory		**70**

Section	What it covers	Marks
Internal assessment	Oral test 10 (August — self-introduction in Sanskrit, Q&A, reciting memorised shlokas) + project work 10 (December) + 4 unit tests → 10	**30**

संस्कृत गद्य भारती — 12 lessons: कविकुलगुरुः कालिदासः; उद्भिज्ज-परिषद्; नैतिकमूल्यानि; विश्वकविः रवीन्द्रः; कार्यं वा साधयेयं देहं वा पातयेयम्; आदिशंकराचार्यः; संस्कृतभाषायाः गौरवम्; मदनमोहनमालवीयः; जीवनं निहितं वने; लोकमान्यःतिलकः; गुरुनानकदेवः; दीनबन्धुः ज्योतिबाफुले. (Also: संस्कृत साहित्य पर एक दृष्टि and वैदिक मङ्गलाचरणम्, unnumbered.)

संस्कृत पद्य पीयूषम् — 7 lessons: लक्ष्य-वेध-परीक्षा; वृक्षाणां चेतनत्वम्; सूक्ति-सुधा; क्षान्तिसौख्यम्; विद्यार्थिचर्या; गीतामृतम्; जीव्याद् भारतवर्षम्.

संस्कृत कथा नाटक कौमुदी — 7 lessons: महात्मनः संस्मरणानि; कारुणिको जीमूतवाहनः; धैर्यधनाः हि साधवः; यौतुकः पापसञ्चयः; भोजस्य शल्यचिकित्सा; ज्ञानं पूततरं सदा; वयं भारतीयाः.

24 essay topics (निबन्ध): विद्या; सदाचारः; परोपकारः; सत्संगतिः; अहिंसा परमो धर्मः; मातृभूमिः; वसुधैव कुटुम्बकम्; राष्ट्रिया एकता; अनुशासनम्; राष्ट्रपिता महात्मा गांधी; संस्कृतभाषायाः महत्त्वम्; भारतीयकृषकः; हिमालयः; तीर्थराजप्रयागः; वनसम्पत्; पर्यावरणम्; परिवारकल्याणम्; राष्ट्रियपक्षिमयूरः; यौतुकम्; दूरदर्शनम्; क्रिकेटक्रीडनम्; जनसङ्ख्या; यातायात सुरक्षा; स्वास्थ्य-शिक्षा.

What to learn: Read each prose and verse lesson for its meaning, learn the grammar topics listed above, and practise translating Hindi sentences into Sanskrit and writing a short Sanskrit essay (at least 8 sentences) on one of the 24 topics. Practise speaking Sanskrit for the oral test — self-introduction, answering questions, and reciting memorised shlokas.

Practice questions: 1. Translate into Hindi: any two lines from कविकुलगुरुः कालिदासः. 2. Write the Sanskrit essay on विद्या (at least 8 sentences). 3. Give the sandhi of: विद्या + आलय; राम + अवतार. 4. Translate into Sanskrit: (a) I go to school. (b) This is my book. 5. Name two lessons from संस्कृत पद्य पीयूषम् and their themes.

Answer key — Sanskrit

- Q1–Q2 — As per the lesson text and correct Sanskrit. Q3 — विद्यालय; रामावतार. Q4 — (a) अहं विद्यालयं गच्छामि। (b) इदं मम पुस्तकम् अस्ति। Q5 — Any two correct, e.g., सूक्ति-सुधा (wise sayings), गीतामृतम् (nectar of the Gita).

F2 — Urdu (उर्दू)

Exam: Saturday 20 February 2027 | **Marks:** 70 theory + 30 internal = 100

Note: The subject code was **not verified** in this session — no code is printed here. The prescribed book title was not captured from the syllabus excerpts read — it is taken from the official PDF at build time (see BUILD-TIME CHECKS).

Section	What it covers	Marks
Section A (खण्ड-अ)	Grammar and use 6; Literary forms 7 (novel, inshaia, afsana, khaka, ghazal, nazm, qasida, marsiya); Figures of speech 5; Idioms and proverbs 5; Essay 6; Unseen prose passage summary 6	35
Section B (खण्ड-ब)	Prose lessons 10; Prose writers' lives and style 4; Verse passages 8; Line ending the nazm list 3; Qasida 2 (Sauda); Marsiya 2 (Mir Anis); Urdu poets' lives and poetry 3; Evolution of Urdu language and literature 3	35
Total theory		**70**
Internal assessment	Oral test 10 + creative writing test 10 + 4 unit tests → 10	**30**

Prose lessons (7): 1. Umrao Jaan Ada (excerpt) — Mirza Hadi Ruswa; 2. [Lesson 2 — title partly legible in the syllabus copy; take the exact title from the official PDF at build time]; 3. Charpai — Rashid Ahmed Siddiqui; 4. Poore Chaand ki Raat — Krishna Chander; 5. Garamkot — Rajendra Singh Bedi; 6. Altaf Hussain Hali — Maulvi Abdul Haq; 7. Hindustani Tehzeeb ke Anasir — Prof. Ehtesham Hussain.

Verse passages (8 poets): Firaq Gorakhpuri; Faiz Ahmed Faiz; Hali; Iqbal; Hasrat Mohani; Asghar Gondvi; Fani Badayuni; Ali Sardar Jafri. (Ghazals of 8 poets and nazms of 8 poets are also prescribed — the full ghazal/nazm poet lists are taken from the official PDF at build time.)

What to learn: The prose lessons and their authors, the verse passages and their poets, the literary forms (novel, afsana, ghazal, nazm, qasida, marsiya), figures of speech, and idioms and proverbs. Practise essay writing and summarising an unseen prose passage.

Practice questions: 1. Who wrote Umrao Jaan Ada, and what is it about? 2. Name the 8 poets of the verse passages. 3. What is the difference between a ghazal and a nazm? 4. What is a marsiya? Who is the marsiya poet in the syllabus? 5. Write a short essay (about 150 words) in Urdu on your school.

Answer key — Urdu

- Q1 — Mirza Hadi Ruswa; the story of Umrao Jaan Ada, a courtesan's life in Lucknow. Q2 — Firaq Gorakhpuri, Faiz Ahmed Faiz, Hali, Iqbal, Hasrat Mohani, Asghar Gondvi, Fani Badayuni, Ali Sardar Jafri. Q3 — A ghazal is a set of couplets on love and life, each couplet complete in itself; a nazm is a poem on one subject with a continuous flow. Q4 — A marsiya is an elegy, usually on the martyrs of Karbala; the syllabus prescribes Mir Anis. Q5 — Marked on content, language and format.

F3 — Computer (कम्प्यूटर) — Code 941

Exam: Thursday 18 February 2027 (morning) | **Marks:** 70 theory + 30 internal = 100

Note on marks: The syllabus prints "30 marks" against the practical heading AND 30 marks internal assessment — the relationship between the two is unclear. **No practical / internal split is printed in this book.** Confirm it from the official PDF at build time (see BUILD-TIME CHECKS). No prescribed book is named in the syllabus excerpts read — take it from the official PDF at build time.

Unit	Topics (in syllabus order)	Marks
Unit 1 — Introduction to C Language and Coding	Introduction to C language; Data types, variables, operators; Input-output; Control statements (conditional + looping)	15
Unit 2 — Arrays: Strings and Functions	Arrays (one-dimensional + multi-dimensional); Strings; Functions; Structures and unions; Searching and sorting	15
Unit 3 — Pointers and File Operations	Pointers; File operations	10
Unit 4 — AI and Drone Technology	Introduction to Artificial Intelligence; Machine learning basics; AI applications; Introduction to drone technology; Drone components; Drone operations; Drone applications; Drone rules and safety; Future of AI and drones	15
Unit 5 — E-commerce and Cyber Security	Introduction to e-commerce; E-commerce models; E-payment systems; E-governance (UMANG / DigiLocker, Aarogya Setu, Mera Aadhaar / UIDAI); Cyber crime (hacking, phishing, cyber fraud, spoofing); Cyber security basics; Prevention (cyber hygiene, MFA, secure Wi-Fi); Digital safety; Case studies	15
Total theory	29 topics	**70**
Internal assessment	Project / file work 10 (August) + project / file work 10 (December) + 4 unit tests → 10	**30**

Practical work — 8 program kinds: input-output programs; conditional programs; looping programs; array programs; structures & unions programs; pointer programs; file-operation programs; searching & sorting programs.

Projects — any 2 of 6, equal marks: Drone technology study; E-commerce case study; E-governance applications; Cyber security applications; AI applications; Road safety booklet.

What to learn: C programming basics — data types, variables, operators, input-output, if-else and loops; arrays, strings, functions, structures and unions; pointers and file operations; and the new topics — AI and machine learning basics, drone technology, e-commerce, e-governance (UMANG, DigiLocker, Aarogya Setu, Aadhaar/UIDAI), cyber crime and cyber security.

Key points: In C, every program starts with main(). A variable must be declared before use. An array stores many values of the same type under one name. A pointer holds the address of a variable. Cyber hygiene means: strong passwords, multi-factor authentication (MFA), secure Wi-Fi, and never clicking unknown links.

Practice questions: 1. Write a C program to print "Hello, World". 2. Write a C program to find the largest of three numbers. 3. What is the difference between an array and a structure? 4. What is a pointer? Give one use. 5. Name three types of cyber crime and one way to prevent each. 6. What is e-governance? Name two examples from the syllabus. 7. What is machine learning, in one sentence?

Answer key — Computer

- Q1 — `#include <stdio.h>` + `int main() { printf("Hello, World"); return 0; }`. Q2 — Read three numbers, compare with if-else, print the largest. Q3 — An array holds many values of the same type; a structure holds values of different types under one name. Q4 — A pointer is a variable that stores the address of another variable; used for dynamic memory and passing values by reference. Q5 — Hacking (use strong passwords + MFA), phishing (do not click unknown links), cyber fraud (verify before paying). Q6 — Government services delivered online; e.g., UMANG/DigiLocker, Aarogya Setu. Q7 — Machine learning is when a computer learns patterns from data instead of being told every rule.

F4 — Home Science (गृह विज्ञान) — Code 930 (girls' file 938, same syllabus)

Exam: Friday 12 February 2027 | **Marks:** 70 theory + 30 practical = 100

Home Science is one of only TWO Class 10 subjects with board-conducted practicals (the other is Science) — external examiner. Do **not** confuse it with CBSE Home Science (code 033, 6 units) — that is a different syllabus. No book is prescribed for this subject.

Unit	Topics (in syllabus order)	Marks
Unit 1 — Home Management (गृह प्रबन्ध)	Home management; family resources; time and energy management; household budgeting	15
Unit 2 — Health Care and Traffic (स्वास्थ्य रक्षा एवं यातायात)	Health care; nutrition and health; traffic rules and road safety	15
Unit 3 — Clothing and Textile Science (वस्त्र एवं परिधान विज्ञान)	Clothing; textile fibres and fabrics; care of clothes	10
Unit 4 — Food and Nutrition Science (खाद्य एवं पोषण विज्ञान)	Food and nutrition; balanced diet; food preservation; cooking methods	15

Unit	Topics (in syllabus order)	Marks
Unit 5 — First Aid and Home Nursing (प्राथमिक उपचार एवं गृह परिचर्या)	First aid; home nursing; common diseases and their care	15
Total theory		**70**
Practical	External 15 (cookery 4 + sewing 4 + sessional 4 + oral 3) + internal 15 (sessional 6 + cookery 6 + oral 3); minimum 10 in practical	**30**

Change in 2026-27: the 30 marks are now a **practical exam with an external examiner** (was school internal assessment). New external/internal split (15+15) and minimum mark (10 in practical). Project marks cut 15 → 6. Unit tests do NOT count in the marksheet (remedial teaching only).

Practical tasks: 14 (in 4 sections). Projects: 12, any 3, with a project file. The full practical-task and project lists are taken from the official PDF at build time (see BUILD-TIME CHECKS).

Note on topic count: The syllabus lists the topics unit by unit as printed above. The official PDF's own topic count is to be confirmed at build time — see BUILD-TIME CHECKS.

What to learn: Managing a home — resources, time, energy and the household budget; health care, nutrition and traffic rules; clothing, fibres and fabrics and their care; food, a balanced diet, preservation and cooking methods; first aid, home nursing and care of common diseases.

Key points: A balanced diet has carbohydrates, proteins, fats, vitamins, minerals and water in the right proportions. Food preservation methods include drying, pickling, freezing and canning. First aid for a burn: cool with clean cold water, cover loosely, and get medical help. Cotton is a plant fibre, wool is animal fibre, and silk comes from the silkworm.

Practice questions: 1. What is a household budget? Why is it useful? 2. Name three traffic rules every pedestrian should follow. 3. What is a balanced diet? Name one food rich in protein and one rich in iron. 4. How is food preserved by pickling? 5. What is the first aid for a small cut? 6. What is the difference between cotton and woollen clothes in care?

Answer key — Home Science

- Q1 — A plan of income and spending for the household; it prevents waste and helps saving. Q2 — Walk on the footpath, cross at the zebra crossing, follow signals (any three). Q3 — A diet with all nutrients in right amounts; protein: pulses/egg; iron: spinach/jaggery. Q4 — Salt, oil and spices prevent germs from growing. Q5 — Clean with antiseptic, apply a clean bandage, and see a doctor if it is deep. Q6 — Cotton can be washed in hot water and ironed hot; wool needs gentle washing and should not be wrung hard.

F5 — Commerce (वाणिज्य) — Code 935

Exam: Friday 19 February 2027 | **Marks:** 70 theory + 30 internal = 100

No book is prescribed — the school picks one on the teacher's advice.

Unit	Topics (in syllabus order)	Marks
Unit 1 — Final Accounts (अन्तिम खाते)	Trading & Profit & Loss Account + Balance Sheet (with general adjustments); bank reconciliation statement; simple entries for cheques, bills, hundis, promissory notes	20
Unit 2 — Business System (व्यापार पद्धति)	Filing; indexing; messaging systems; time- and labour-saving office machines; home trade — wholesale/retail, invoice, sales statement	NOT PRINTED in the syllabus
Unit 3 — Elements of Banking (बैंकिंग के तत्व)	Bank: origin, definition, functions, importance; RBI, SBI, commercial banks, cooperative banks, indigenous bankers	15
Unit 4 — Economics (अर्थशास्त्र)	Law of diminishing utility; expenditure and saving; social importance of saving; factors of production	15
Total theory (printed)		**50 of 70**
Internal assessment	2 projects × 10 + 4 unit tests → 10	**30**

Important: Only three unit marks are printed in the official syllabus (20 + 15 + 15 = 50). **Unit 2's marks are NOT printed** — this book does not invent a figure for it. The figure (if any) is taken from the official PDF at build time.

Projects: 16 topics. The full list is taken from the official PDF at build time.

What to learn: Final accounts — trading account, profit & loss account and balance sheet, with general adjustments; bank reconciliation statement; business systems — filing, indexing, messaging, office machines, and home trade (wholesale and retail, invoice, sales statement); banking — the origin, functions and importance of banks, and the RBI, SBI, commercial banks, cooperative banks and indigenous bankers; and economics — the law of diminishing utility, expenditure and saving, and the factors of production.

Key points: The trading account shows gross profit; the profit & loss account shows net profit; the balance sheet shows assets and liabilities. A bank reconciliation statement explains the difference between the cash book and the bank pass book. The RBI is the central bank of India. The factors of production are land, labour, capital and organisation.

Practice questions: 1. What is the difference between a trading account and a profit & loss account? 2. What is a bank reconciliation statement? Why is it prepared? 3. Name three functions of a bank. 4. What is the difference between wholesale and retail trade? 5. State the law of diminishing utility with an example. 6. Name the four factors of production.

Answer key — Commerce

- Q1 — Trading account finds gross profit from buying and selling; profit & loss account finds net profit after all expenses and incomes. Q2 — A statement matching the cash book balance with the pass book balance; it explains differences caused by cheques, charges and interest. Q3 — Accepting deposits, giving loans, remitting money (any three). Q4 — Wholesale sells in bulk to retailers; retail sells in small quantities to consumers. Q5 — As a person consumes more units of a good, the extra satisfaction from each additional unit falls (e.g., the second glass of water gives less satisfaction than the first when thirsty). Q6 — Land, labour, capital, organisation.

F6 — Agriculture (कृषि विज्ञान) — Code 937

Exam: Wednesday 24 February 2027 (LAST paper) | **Marks:** 70 theory + 30 internal = 100

Note: The prescribed book title was not captured from the syllabus excerpts read — it is taken from the official PDF at build time. **Pass marks are NOT printed in the syllabus** — no pass figure is printed in this book.

Unit	Topics (in syllabus order)	Marks
Unit 1 — Soil Science (मृदा विज्ञान)	Soil; soil types; soil fertility; soil conservation	7
Unit 2 — Irrigation and Drainage (सिंचाई एवं जल निकासी)	Irrigation methods; drainage	5
Unit 3 — Manures and Fertilisers (खाद एवं उर्वरक)	Manures; fertilisers; composting	8
Unit 4 — Tillage (जुताई)	Tillage; implements; sowing	5
Unit 5 — Disasters (आपदाएँ)	Natural disasters; crop protection	2
Unit 6 — Farm Crops (खेत की फसलें)	Paddy; groundnut; wheat; sugarcane	10
Unit 7 — Vegetable Cultivation (सब्जी की खेती)	Potato; muskmelon; cauliflower; tomato; bottle gourd; okra; onion	10
Unit 8 — Horticulture (उद्यान विज्ञान)	Mango; guava; papaya; lemon	10
Unit 9 — Animal Husbandry (पशुपालन)	Animal husbandry; dairy; poultry	8
Unit 10 — Fruit and Vegetable Preservation (फल-सब्जी संरक्षण)	Preservation methods; processing	5
Total theory		**70**
Internal assessment	Practical work + project work + 4 unit tests	**30**

What to learn: Soil — its types, fertility and conservation; irrigation methods and drainage; manures, fertilisers and composting; tillage, implements and sowing; natural disasters and crop protection; the main farm crops (paddy, groundnut, wheat, sugarcane); vegetable cultivation (potato, muskmelon, cauliflower, tomato, bottle gourd, okra, onion); horticulture (mango, guava, papaya, lemon); animal husbandry, dairy and poultry; and preservation of fruits and vegetables.

Key points: Loamy soil is best for most crops. Manures are organic (farmyard manure, compost); fertilisers are chemical (urea, superphosphate, potash). Drip irrigation saves water. Crop rotation keeps the soil fertile. Mango is the king of fruits; the main fruit crops of Uttar Pradesh include mango and guava.

Practice questions: 1. Name three types of soil and one crop suited to each. 2. What is the difference between manure and fertiliser? 3. Why is drip irrigation better than flood irrigation? 4. Name the four farm crops in Unit 6. 5. Name three vegetables from Unit 7 and the season in which each is grown. 6. What is composting?

Answer key — Agriculture

- Q1 — Sandy (groundnut), loamy (wheat, most crops), clayey (paddy). Q2 — Manure is organic matter from plants/animals and improves soil structure; fertiliser is a chemical that supplies specific nutrients. Q3 — It gives water directly to the roots, so less water is wasted. Q4 — Paddy, groundnut, wheat, sugarcane. Q5 — Any three correct, e.g., potato (rabi), tomato (rabi/zaid), okra (kharif/zaid). Q6 — Turning plant and animal waste into nutrient-rich manure by rotting.

F7 — Human Science (मानव विज्ञान / Social-Cultural Human Science) — Code 942

Exam: Tuesday 9 February 2027 (evening) | **Marks:** 70 theory + 30 internal = 100

Note: The timetable's "Anthropology" on 9 February evening is **this subject** — Human Science (मानव विज्ञान), code 942 — not a separate Anthropology subject.

Prescribed textbooks (6, named in the official syllabus): मानवशास्त्र का परिचय — Vibha Agnihotri; What is Anthropology — A.R.N. Srivastava; Tribal India — Nadeem Hasnain; जनजातीय भारत — Nadeem Hasnain; General Anthropology — Nadeem Hasnain; आपदा प्रबंधन — Lohendra Singh.

Unit	Topics (in syllabus order)	Marks
Unit 1 — Scope and Branches of Anthropology (मानवशास्त्र की परिधि एवं शाखाएँ)	Scope of anthropology 5; branches of anthropology 5	10

Unit	Topics (in syllabus order)	Marks
Unit 2 — Ethnography, Ethnology and Tribes of India (नृवंशविज्ञान, नृजातिविज्ञान एवं भारत की जनजातियाँ)	Ethnography and ethnology 10; classification of tribes 10; tribe definition, Scheduled Tribes, PVTGs 10	30
Unit 3 — Khasa, Khasi, Toda and Tharu Tribes (खस, खासी, टोडा एवं थारू जनजातियाँ)	Khasa; Khasi; Toda; Tharu	10
Unit 4 — Tribal Problems and Indigenous Knowledge (जनजातीय समस्याएँ एवं स्वदेशी ज्ञान)	Tribal problems 10; indigenous knowledge and disaster management 10	20
Total theory		**70**
Internal assessment	Project work 20 + 4 unit tests → 10	**30**

Projects: 8, any 3, chosen by the teacher. The full project list is taken from the official PDF at build time.

Note on topic count: The official PDF's topic count for this subject is ambiguous from the listed items — it is confirmed against the official PDF at build time (see BUILD-TIME CHECKS). This book lists the topics unit by unit as printed above and does not assert a total count.

What to learn: What anthropology is — its scope and branches (physical, social-cultural, archaeological, linguistic); ethnography and ethnology; how tribes are classified; what a tribe is; Scheduled Tribes and Particularly Vulnerable Tribal Groups (PVTGs); four tribes in detail — Khasa, Khasi, Toda and Tharu; the problems tribes face; and indigenous knowledge, including its role in disaster management.

Key points: Anthropology is the study of human beings — their body, culture, society and past. A tribe is a group with its own territory, language, customs and social organisation. The Constitution gives special protection to Scheduled Tribes. The Tharu live in the Tarai region of Uttar Pradesh and Uttarakhand; the Toda live in the Nilgiri hills; the Khasi live in Meghalaya; the Khasa live in the Himalayan region.

Practice questions: 1. What is anthropology? Name its four branches. 2. What is the difference between ethnography and ethnology? 3. What is a PVTG? Give one example. 4. Name the four tribes studied in Unit 3 and the region of any two. 5. Name two problems faced by tribal communities. 6. How can indigenous knowledge help in disaster management?

Answer key — Human Science

- Q1 — The study of human beings in all their aspects; branches: physical, social-cultural, archaeological, linguistic. Q2 — Ethnography describes one culture in detail; ethnology compares cultures to find general patterns. Q3 — Particularly Vulnerable Tribal Group — a tribe that is especially backward and at risk; e.g., the tribes listed by the government as PVTGs. Q4 — Khasa (Himalayan region), Khasi (Meghalaya), Toda (Nilgiri hills), Tharu (Tarai of UP/Uttarakhand). Q5 — Loss of land and forests, poverty, lack of education and

health care (any two). Q6 — Local knowledge of weather, terrain, plants and traditional warning signs helps communities prepare for and survive floods, droughts and other disasters.

F8 — IT-ITeS (सूचना प्रौद्योगिकी)

Exam: Wednesday 10 February 2027 (evening, shared slot) | **Marks:** 70 theory + 30 internal = 100

Note: The exam slot on Wednesday 10 February evening is **shared by all 10 vocational trades** (Electrician, Healthcare, Automobile, Solar System Repair, Plumber, Security, IT/ITES, Mobile Repair, Disaster Management, Retail Trading, Cyber Security). The prescribed book title was not captured from the syllabus excerpts read — take it from the official PDF at build time.

Unit	Topics (in syllabus order)	Marks
Unit 1 — Introduction to Computer	Computer basics; hardware and software	8
Unit 2 — Operating System	Operating systems; file management	8
Unit 3 — Word Processing	Word processing; document creation	8
Unit 4 — Spreadsheet	Spreadsheets; formulas and functions	8
Unit 5 — Internet and GPS	Internet; GPS; e-mail	9
Unit 6 — Modern Communication Devices	Modern communication devices; mobile technology	9 (as read from the syllabus PDF — see note)
Unit 7 — Preparing a Presentation	Presentation software; slide design	10
Unit 8 — Making a Project	5-page project on Word / Excel / PowerPoint	10 (as read from the syllabus PDF — see note)
Total theory		**70**
Internal assessment	Practical + project 10 (August) + practical + project 10 (December) + 4 unit tests → 10	**30**

Note on Units 6 & 8: Their marks (9 and 10) are a **reading of duplicated print in the syllabus PDF**, not figures printed beside the headings. They are labelled as such here and confirmed against the official PDF at build time.

Projects: 7 topics. The full list is taken from the official PDF at build time.

Pass: 23 written + 10 internal = 33.

What to learn: Computer basics (hardware and software); operating systems and file management; word processing and document creation; spreadsheets, formulas and functions; the internet, GPS and e-mail; modern communication devices and mobile technology; preparing a presentation; and making a 5-page project in Word / Excel / PowerPoint.

Key points: Hardware is the physical parts of a computer; software is the programs that run on it. An operating system manages the computer (e.g., Windows, Linux). A spreadsheet stores data in rows and columns; a formula starts with "=". GPS gives the location of a device using satellites. E-mail needs an address, a subject and a message.

Practice questions: 1. What is the difference between hardware and software? Give two examples of each. 2. What is an operating system? Name two. 3. In a spreadsheet, how do you add the numbers in cells A1 to A5? 4. What is GPS, and what is it used for? 5. Write the steps to create a 3-slide presentation. 6. What should a good e-mail contain?

Answer key — IT-ITeS

- Q1 — Hardware: keyboard, monitor; software: word processor, web browser. Q2 — Software that manages the computer's resources; e.g., Windows, Linux. Q3 — `=SUM(A1:A5)`. Q4 — Global Positioning System; it finds the location of a device using satellites (navigation, maps). Q5 — Open presentation software, choose a design, add a title slide, add content slides, save the file. Q6 — A clear subject, a polite greeting, the message, and a closing with the sender's name.

F9 — Other Class 10 subjects (§2.14)

These subjects have official syllabus PDFs on upmsp.edu.in (Board_Syllabus.aspx). Their unit lists were **not** extracted in the research session — **take them from the official PDFs at build time; no unit marks are invented here.** Exam dates are from the official 2027 timetable.

Subject	Code	Exam
Elementary Hindi	902	Fri 5 Feb 2027 (morning, with Hindi) — own syllabus, NOT the main Hindi syllabus
Sangeet — Gayan / Music Vocal	933	Tue 23 Feb 2027 (morning)
Sangeet — Vadan / Music Instrumental	934	Wed 17 Feb 2027 (evening)
Art — Drawing	936	Date in the timetable under Painting / Ranjan Kala
Tailoring / Silai	939	Thu 18 Feb 2027 (morning, with Computer)

Subject	Code	Exam
Painting	940	Mon 22 Feb 2027 (morning); Ranjan Kala (creative art) same slot
Moral, Sports and Physical Education	944	Internal-assessment subject; portal active from Fri 1 Jan 2027
Retail Trading	971	Wed 10 Feb 2027 (evening, shared slot)
Security	972	Wed 10 Feb 2027 (evening, shared slot)
NCC	981	Placement disputed — 8 Feb evening vs 9 Feb (confirm from the official date-sheet PDF)
Other languages (Gujarati 903, Punjabi, Bengali, Marathi, Assamese, Odia, Kannada, Kashmiri, Sindhi, Tamil, Telugu, Malayalam, Nepali)	—	Tue 16 Feb 2027 (morning) — one source says 15 Feb evening; confirm from the official date-sheet PDF
Pali, Arabic, Persian	—	Tue 23 Feb 2027 (evening)
Vocational trades (Electrician, Healthcare, Automobile, Solar System Repair, Plumber, Mobile Repair, Disaster Management, Cyber Security)	—	Wed 10 Feb 2027 (evening, shared slot with IT-ITeS)

Subject count: UPMSP lists **47 Class 10 subjects** in total per the ncertbookspdf code table; AglaSem lists **46** (4 Nov 2026) — one subject's inclusion differs between the two lists. Confirm the count from the official UPMSP subject list at build time.

BUILD-TIME CHECKS (editor-facing — resolve before publishing)

These items are **not** facts printed in the book above. Each must be confirmed from the official source at build time.

1. **Exact per-subject syllabus PDF URLs + model-paper 2027 links** — take from the live upmsp.edu.in (Board_Syllabus.aspx) at build time. Never guess a URL. Official homepage: https://upmsp.edu.in/ — official 2027 date-sheet PDF as recorded: https://www.upmsp.edu.in/Downloads/TimeTable_2027_Vigyapti.pdf (recorded in the research file, not re-opened in this session — re-verify at build time).
2. **Home Science topic count** — the official PDF's count is "22", but Shankar counts 17 from the listed items as printed (4+3+3+4+3) and Ravi's independent count is also 17 — two counts agree the printed 22 does not match the list. Do not print "22 topics" until the official PDF is checked; print the topic list without a total count if it cannot be settled.
3. **Human Science topic count** — "Topics: 8" is ambiguous from the listed items (Ravi counts 11 by one grouping). Neither count settles it; the official PDF is the decider. Do not print a total count until confirmed.

4. **Subject count** — UPMSP lists 47 Class 10 subjects per the ncertbookspdf code table; AglaSem lists 46 (4 Nov 2026). Confirm the count from the official UPMSP subject list at build time.
5. **Commerce Unit 2 marks** — NOT printed in the official syllabus. Do not print 20 (or any figure) for Unit 2 unless the official PDF prints one.
6. **Computer practical / internal 30-mark relationship** — the PDF prints "30 marks" against the practical heading AND 30 marks internal assessment. Do not print a practical/IA split until the official PDF is read.
7. **Agriculture pass marks** — NOT printed in the PDF. Do not print a pass figure for Agriculture.
8. **Book titles not captured** — Hindi (book title(s)), Urdu (book title), Agriculture (book title), Computer (book title), IT-ITeS (book title); Urdu ghazal/nazm poet lists (8+8) in full; Urdu prose lesson 2's exact title (partly legible in OCR). Take all from the official PDFs at build time.
9. **Urdu subject code** — NOT verified. Do not print a code without the official list.
10. **Full lists not extracted** — Maths project list items 1–11; Science 15 experiments + 18 projects; Home Science 14 practical tasks + 12 projects; Commerce 16 projects; Agriculture practical + project lists; Human Science 8 projects; IT-ITeS 7 projects; Hindi khand kavya district-wise mapping (9 titles listed; district mapping in the official PDF). Take all from the official PDFs at build time.
11. **SST 30-mark component** — settled as 70+30 in the research session (3 sources vs 1 outlier). Confirm once more against the official PDF at build time.
12. **IT-ITeS Units 6 & 8 marks (9 and 10)** — a reading of duplicated print in the PDF, not figures printed beside the headings. Confirm against the official PDF at build time.
13. **Dates to double-check against the official date-sheet PDF before publishing** — NCC placement (8 Feb evening vs 9 Feb); additional-languages date (16 Feb vs 15 Feb evening); Human Science / "Anthropology" on 9 Feb evening. Everything else in the date table is 3–4 source confirmed.
14. **Admit card 2027 date, result 2027 date, model papers 2027, compartment 2027 dates** — not announced as of 24 Nov 2026. Do not print a date until officially announced.
15. **Syllabus-completion deadline** — 10 Jan 2027 (one source) vs 25 Jan 2027 (another). Do not headline either.
16. **Phase 1 practical divisions — Azamgarh** — included in the 10-division list (one source omits it, likely a rendering squeeze). Check the official notice.
17. **2027 practical notice text** — read via 3 news sources + a photo of the notice, not opened from upmsp.edu.in directly. Open the official notice at build time.
18. **Optional-subject format** — this book carries all optional subjects in one Part F with a "choose one" marker. Whether the published book is one combined copy or one copy per optional subject is a format decision for Kamal.
19. **"No negative marking"** — NOT verified for UP Board Class 10. This book does not claim it anywhere. Do not add the claim at build time without a verified source.
