English Medium
Second Edition · November 2026

TET-II

FREE DEMO

General Knowledge & Aptitude

Knowledge, reasoning and professional judgement

- Detailed concepts and classroom examples
- Topic-linked practice with explained answers
- Selected earlier-examination questions

BOOK 04 | Mathematics-Science Series

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General Knowledge & Aptitude

Gujarat TET-II · English Medium

Mathematics-Science Series · Book 04

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Examinations qualified

TET-1 (2025) | TET-2 (2023) | TAT (2023)

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General knowledge, reasoning, logical ability, teaching aptitude and data interpretation belong to the common 25-mark section together with current trends in education. This volume develops the knowledge and aptitude component; Book 05 develops education and current trends. Separate fixed marks are not assigned to these two books. Syllabus basis: the resolution of 8 October 2025.

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Earlier-examination records are labelled by year and question number and use translated or condensed study wording. Where the original alternatives are unavailable, short-answer form is retained; alternatives have not been invented. A clarified assumption or reworded prompt is indicated. Five 2013 records derive from a provisional common-key source and are not represented as final-key verification. A historical keyed answer is distinguished from a uniquely established solution where necessary.

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Preface

Dear learner,

General knowledge becomes more useful when names, places and dates are connected with meaning. A river course differs from its basin; a constitutional institution differs from its building; a historical ceremony differs from a current office-holder. Read those distinctions before memorising an answer.

Reasoning questions require the same care. Separate the rule supplied from an assumption you add, path length from displacement, a necessary condition from a sufficient one, and a percentage from a percentage-point difference. Worked examples show the intermediate steps, units and checks. The illustrative diagrams and data are for study, rather than reports of actual school performance.

This second edition retains the 160 earlier practice questions, corrects identified wording and explanations, and mixes in 110 new questions drawn from a wider range of taught subtopics. Each answer follows its question with a reason and an English Study link to the relevant teaching paragraph, list item or table row earlier in the book.

The 37 selected earlier-examination records are labelled by year and question number. They are translated or condensed short-answer study forms; missing alternatives have not been reconstructed. Five 2013 records retain provisional-key status. Where a prompt needs an explicit assumption, or its keyed answer is not unique without the original alternatives, the limitation is explained. These records are selected practice, not every past question.

For a calculation, write the quantity and unit first, perform the steps and test the result. For an inference, ask what the evidence actually establishes. For a classroom decision, connect the learning goal, learner evidence, dignity and a useful next action. Return to the linked teaching after each attempt.

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CHAPTER 1

Gujarat: Geography, Resources and Heritage

Read Gujarat as connected regions

- Gujarat was formed on **1 May 1960** after the reorganisation of Bombay State. Its capital is **Gandhinagar**. Ahmedabad is a major city but is not the present state capital.
- A useful physical grouping is **Kutch, Saurashtra and mainland Gujarat**. This grouping describes broad regions; it is not a list of administrative districts.
- Kutch includes saline Rann landscapes. Saurashtra is a peninsula; mainland Gujarat contains important alluvial plains and river valleys.
- The **Gulf of Kutch** and **Gulf of Khambhat** are different inlets. Locate each on a map before learning names in isolation.
- Major westward-draining river systems include the **Sabarmati, Mahi, Narmada and Tapi**. A river basin is the area drained by the river and its tributaries; it is not identical to a district boundary.
- Southern Gujarat is generally wetter than Kutch and much of northern Gujarat. Water availability, relief and soil help explain cropping and settlement differences.

Place or resource	Connection to remember
Patan	Rani-ki-Vav, a stepwell and UNESCO World Heritage property inscribed in 2014.
Champaner-Pavagadh	Archaeological landscape; UNESCO inscription in 2004.
Dholavira	Harappan city in Kutch; UNESCO inscription in 2021.
Ahmedabad	Historic urban heritage and the Sabarmati association.
Gir landscape	Important natural habitat of the Asiatic lion.
Coastal Gujarat	Ports, fishing, salt production and maritime exchange.

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How geography questions combine ideas

- A coastal location may support trade, but all coastal land is not suitable for the same activity. Distinguish a geographic possibility from a guaranteed economic result.
- An irrigation project can change water availability, not the rainfall received by every field. Do not confuse rainfall, runoff, stored water and groundwater.
- **Renewable** resources can regenerate under suitable use; renewable does not mean inexhaustible. Conservation addresses both supply and demand.
- Use current maps to study district and taluka boundaries.

Worked example: Eliminating a mismatched pair

1. Patan–Rani-ki-Vav and Kutch–Dholavira connect location and site correctly.
2. A proposed pair Kutch–Champaner would mix distinct places.
3. For matching questions, check site, location, period and property type separately.

Study method

- Draw a blank state outline and mark the two gulfs, Kutch, Saurashtra and the four river systems.
- Create separate columns for natural region, district, city and heritage property.
- Keep inscription years with the named property; do not use a single year for all Gujarat heritage sites.

Gujarat: a region-by-region comparison

- **Kutch:** distinguish the Great Rann, Little Rann, the Gulf of Kutch and the inland settlements. A Rann is a saline lowland landscape; it is not another name for the gulf. Seasonal flooding and evaporation help explain salt accumulation.
- **Saurashtra:** the peninsula lies between the two gulfs. Its coastal economy, uplands and seasonal streams differ from the broad mainland river plains. The Gir landscape belongs to this region.

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- **Mainland:** northern, central and southern areas show differences in rainfall, relief and settlement. Alluvial plains support intensive cultivation where water and other inputs are available. The eastern belt includes hilly and forested areas.
- A **physiographic region** describes land characteristics; a district is an administrative unit. Match each question to the kind of division it asks about.

Feature	What it helps explain
Alluvial deposits	River-carried material and fertile plains; soil characteristics vary with deposit and drainage.
Black soils	Clay-rich soils that retain moisture; waterlogging and drainage also matter.
Saline conditions	Salt concentration can restrict ordinary crop growth; salinity is different from low rainfall alone.
Coast and estuary	Trade, fishing and mixed freshwater–saltwater habitats.
Groundwater	Stored underground water; a falling water table can indicate withdrawal faster than recharge.

Rivers, rainfall and water management

- A river's **source**, tributaries, basin and mouth are separate facts. Sabarmati, Mahi, Narmada and Tapi reach Gujarat from different catchments; finding one city beside a river does not identify the whole basin.
- A **dam** stores or regulates river water. A canal conveys water. A check dam slows local runoff and may support recharge. A well accesses groundwater. These structures perform different functions.
- Water conservation includes repairing leaks, harvesting suitable rainwater, protecting recharge areas and choosing efficient use. Water saved per unit of output is a better comparison than the size of a structure alone.
- In a map question, trace the coast, gulf and river mouth first, then locate the settlement. In an agriculture question, connect water, soil, climate, labour, markets and transport.

Heritage: connect place, evidence and meaning

- **Dholavira** demonstrates Harappan urban planning and water management. **Lothal** is another Gujarat Harappan site associated with trade and craft activity. These are archaeological sites, not medieval dynastic capitals.
- **Patan** connects stepwell architecture and textile traditions. Rani-ki-Vav's heritage inscription is a modern recognition; it is not the monument's construction date.
- **Garba** is a living performance tradition. Its UNESCO inscription in 2023 concerns intangible cultural heritage. It should not be classified as a stone monument or archaeological excavation.
- Study a heritage item under four labels: **location, form, historical context and distinguishing feature**. This makes unfamiliar matching questions easier than memorising an isolated name.

Worked example: Sorting a mixed list

1. Sort Dholavira, the Gulf of Khambhat, a district boundary and Garba by type.
2. They represent an archaeological settlement, a coastal inlet, an administrative limit and a living cultural practice.
3. The sorting criterion is the **kind of entity**; a shared connection with Gujarat is too broad to answer a classification question.

Institutions, heritage and names in earlier questions

A retained 2012 question-answer record pairs the historical name **Parnasha** with the Banas river named in that item. Treat this as the recorded pairing, rather than assuming that every river called Banas has the same historical name.

The consecration of the reconstructed Somnath temple on **11 May 1951** was performed by **Dr Rajendra Prasad**, then President of India. The ceremony, the reconstruction project and the ancient history of the site concern different dates and roles.

Gujarat Vidyapith's motto is **Sa Vidya Ya Vimuktaye**, meaning knowledge or education that liberates. A motto is the institution's guiding expression; it is not the name of its founder.

Earlier-examination questions

TET-II 2015 | Q20 | Translated study form | Short-answer form

1. If pupils are dissatisfied with one's teaching, what action is keyed?
Answer: Reflect on and improve one's teaching. Self-review should use evidence and pupil feedback, followed by changes.

Study link: Specific feedback, access and reflective action, p. 106.

TET-II 2015 | Q25 | Translated study form | Short-answer form

2. Pupils want to organise an entertainment programme. What should the teacher do?
Answer: Help them plan an appropriate programme. Guided participation supports responsibility and teamwork.

Study link: Specific feedback, access and reflective action, p. 106.

TET-II 2017 | Q11 | Translated study form | Short-answer form

3. How can a teacher develop cooperation among pupils?
Answer: Provide opportunities for group work. Structure the shared work so pupils participate; physical grouping alone is insufficient.

Study link: Communication and participation, p. 103.

TET-II 2017 | Q14 | Translated study form | Short-answer form

4. What parent-related action can help improve pupils' learning outcomes?
Answer: Encourage regular discussion with the teacher about study.
The historical response concerns parent-teacher communication, not a guaranteed effect size.

Study link: Ethics and school relationships, p. 104.

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