CTET PAPER I

Chapter-wise Study Material

English Medium · Classes 1–5 (Primary Stage)

Child Development & Pedagogy · Language Pedagogy
Mathematics · Environmental Studies

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SECTION 1

Child Development & Pedagogy

Foundations of how children grow, think and learn · **30 Questions in CTET Paper I**

Chapter 1: Growth, Development & Principles

Growth vs Development

Growth	Quantitative change — increase in height, weight, size of organs. It is measurable and stops at maturity.
Development	Qualitative + quantitative change — overall progressive changes in abilities, behaviour and functioning. Continues throughout life.
Maturation	Natural unfolding of genetically programmed changes (e.g., walking readiness), largely independent of training.

Principles of Development

- **Continuity:** development is a continuous, lifelong process.
- **Sequentiality:** follows an orderly sequence (sitting → crawling → standing → walking).
- **Cephalocaudal:** proceeds from head to toe (head control comes before leg control).
- **Proximodistal:** from centre of body outward (arm control before finger control).
- **General to specific:** whole-hand grasping before finger (pincer) grasping.
- **Individual differences:** every child develops at their own pace; comparisons are misleading.
- **Interaction of heredity and environment:** heredity sets the potential, environment shapes how far it is realised.
- **Multidimensional:** physical, cognitive, social, emotional and moral domains develop together and influence each other.

Stages of Development

Stage	Age	Key features
Infancy	0–2 yrs	Rapid physical growth; sensory exploration; attachment; stranger anxiety (~8 months).
Early childhood	2–6 yrs	Language explosion; play age; egocentric thinking; fine motor skills develop.
Later childhood	6–12 yrs	School age; logical thinking about concrete things; peer groups; industry.
Adolescence	12–18 yrs	Puberty; identity formation; abstract reasoning; emotional fluctuation; peer influence peaks.

EXAM TIP: CTET often asks the direction principles. Remember: **Cephalo-caudal = head→toe**, **Proximo-distal = centre→periphery**. Also: growth is quantitative; development is both.

Chapter 2: Piaget's Theory of Cognitive Development

Jean Piaget viewed the child as a "little scientist" who actively constructs knowledge by exploring the world. Cognitive development happens through the interaction of these processes:

Schema	A mental framework/structure used to organise and interpret information.
Assimilation	Fitting new information into an existing schema (calling a cow "dog" because it has four legs).
Accommodation	Modifying an existing schema, or creating a new one, to fit new information (learning that a cow is a different animal).
Equilibration	The balancing act between assimilation and accommodation that drives learning forward.

The Four Stages

Stage	Age	Key achievements / limitations
Sensorimotor	0–2 yrs	Learning via senses and movement; **object permanence** develops (objects exist even when out of sight).
Preoperational	2–7 yrs	Symbolic thought and language grow; **egocentrism** (cannot take another's viewpoint), **animism** (lifeless objects are alive), **centration** (focus on one aspect only), lacks conservation and reversibility.
Concrete operational	7–11 yrs	Logical thinking about **concrete** objects; achieves **conservation, reversibility, seriation, classification**; still weak at abstract ideas.
Formal operational	11+ yrs	**Abstract, hypothetical and deductive** reasoning; can think about possibilities and test hypotheses mentally.

EXAM TIP: Stage-identification questions are guaranteed. Cues: "moon follows me" = egocentrism/animism (preoperational); arranging sticks by length = seriation (concrete); solving abstract algebra = formal operational.

Chapter 3: Vygotsky & Kohlberg

Vygotsky's Socio-cultural Theory

• Learning is fundamentally a **social and cultural** process — children learn through interaction with adults and capable peers.

• **Zone of Proximal Development (ZPD):** the gap between what a child can do alone and what they can do with guidance. Teaching is most effective inside the ZPD.

• **Scaffolding:** temporary, adjustable support (hints, prompts, demonstrations) that is gradually withdrawn as the learner becomes independent.

• **More Knowledgeable Other (MKO):** anyone (teacher, parent, peer) with greater skill who guides the learner.

• **Language** is the most important cultural tool of thought; private speech (self-talk) helps children regulate their own thinking.

Kohlberg's Stages of Moral Development

Level	Stages	Basis of moral judgement
Pre-conventional	1. Punishment–obedience 2. Instrumental/reward	Avoid punishment; gain rewards. "Right" = what avoids trouble or earns benefit.
Conventional	3. Good boy / good girl 4. Law and order	Approval of others; maintaining rules, duty and social order.

Level	Stages	Basis of moral judgement
Post-conventional	5. Social contract 6. Universal ethical principles	Laws as changeable social agreements; self-chosen universal principles of justice and human rights.

EXAM TIP: Vygotsky = social learning, ZPD, scaffolding; Piaget = individual construction, stages. Kohlberg cue words: punishment (pre-conventional), approval/rules (conventional), conscience/universal principles (post-conventional).

Chapter 4: Intelligence & Individual Differences

Key ideas about intelligence

- IQ formula (Stern/Terman): **IQ = (Mental Age ÷ Chronological Age) × 100**.
- Intelligence is **multifaceted and modifiable**; it is shaped by both heredity and environment.
- Alfred Binet created the first intelligence test; Spearman proposed the general "g" factor.

Gardner's Multiple Intelligences

Intelligence	Strength shown by
Linguistic	Words, reading, storytelling, debate
Logical-mathematical	Numbers, reasoning, patterns, problem solving
Visual-spatial	Maps, diagrams, charts, imagining objects in space
Musical	Rhythm, melody, sensitivity to sound
Bodily-kinaesthetic	Movement, sports, dance, hands-on work
Interpersonal	Understanding other people, leadership, teamwork
Intrapersonal	Understanding oneself, self-reflection, goal setting
Naturalistic	Recognising plants, animals and natural patterns

Individual differences

Children differ in ability, interest, pace, learning style (visual / auditory / kinaesthetic), socio-cultural background and language. The professional response is **differentiated instruction** — varying content, activities and assessment to meet diverse needs — never labelling, ranking or one-size-fits-all teaching.

EXAM TIP: A learner strong with maps and charts = visual-spatial; one who understands their own feelings = INTRApersonal (within self); one good with others = INTERpersonal (between people).

Chapter 5: Theories of Learning

Theory	Theorist	Core idea
Classical conditioning	Pavlov	Learning by association — a neutral stimulus (bell) paired with a natural one (food) comes to trigger the response (salivation). Explains learned fears/likes.
Operant conditioning	Skinner	Behaviour is shaped by its **consequences**. Reinforcement (positive = add reward; negative = remove unpleasant thing) increases behaviour; punishment decreases it.

Theory	Theorist	Core idea
Trial & error / Connectionism	Thorndike	Learning by repeated attempts. Laws of **Readiness, Exercise, Effect** (satisfying results strengthen the response).
Insight learning	Kohler	Sudden "aha" understanding of the whole problem (chimpanzee & banana experiments).
Social/observational learning	Bandura	Learning by **observing and imitating models** (Bobo doll experiment). Basis of modelling good behaviour.
Constructivism	Piaget / Vygotsky / Bruner	Learners actively **construct** knowledge from experience; the teacher is a facilitator, not a transmitter.

Reinforcement essentials

- **Positive reinforcement:** add something pleasant (praise, sticker) → behaviour increases.
- **Negative reinforcement:** remove something unpleasant (cancel extra homework) → behaviour increases.
- **Punishment:** aims to decrease behaviour — least desirable; never confuse with negative reinforcement.
- Reinforcement works best when **immediate, specific and consistent**.

EXAM TIP: Negative reinforcement INCREASES behaviour by removing something unpleasant — it is NOT punishment. This single distinction appears in CTET again and again.

Chapter 6: Motivation & the Classroom Environment

Intrinsic motivation	Doing a task for its own enjoyment, curiosity or sense of mastery — the most durable form of motivation.
Extrinsic motivation	Doing a task for external rewards (marks, prizes, praise) or to avoid punishment.

Maslow’s Hierarchy of Needs (bottom → top)

1. Physiological (food, water, rest) → 2. Safety → 3. Love & belonging → 4. Esteem → 5. **Self-actualization** (realising one’s full potential). A hungry or insecure child cannot focus on learning — lower needs must be met first.

Building a positive classroom

- Foster a **growth mindset** (Dweck): praise effort and strategies, not fixed ability.
- Treat errors as learning opportunities; build a safe, non-threatening climate for risk-taking.
- Use meaningful, challenging tasks tied to real life; give learners choice and voice.
- Avoid public ranking and constant comparison — they damage self-esteem and motivation.
- **Pygmalion effect:** teacher expectations influence student performance — expect the best.

EXAM TIP: "Best way to motivate intrinsically" → meaningful and challenging tasks / curiosity, never rewards or fear. Maslow’s base = physiological needs; peak = self-actualization.

Chapter 7: Inclusive Education & Special Needs

Inclusive education means **all children learn together** in the same classroom — including children with disabilities, from disadvantaged groups, and gifted learners — with teaching adapted to each one's needs (supported by the RTE Act 2009 and NEP 2020).

Common specific learning difficulties

Condition	Difficulty with	Classroom signs
Dyslexia	Reading	Letter reversals (b/d), slow laboured reading, poor spelling despite normal intelligence.
Dysgraphia	Writing	Illegible handwriting, awkward pencil grip, trouble organising ideas on paper.
Dyscalculia	Mathematics	Trouble with number sense, symbols, tables, sequencing of steps.
ADHD	Attention & impulse control	Restlessness, difficulty sustaining attention, acting without thinking.
Autism spectrum	Social communication	Difficulty with social interaction, repetitive behaviour, sensory sensitivities.

Teacher's role

- Early identification and referral; never label, mock or segregate.
- Adapt methods, materials, seating and time (differentiated instruction; multi-sensory teaching).
- Gifted children need **enrichment and challenge**, not just extra of the same work.
- Multilingualism and diversity are **resources**, not problems.

EXAM TIP: Inclusion ≠ separate special schools. The CTET answer always favours teaching ALL children together with adapted support inside the regular classroom.

Chapter 8: Assessment & Evaluation

Type	When	Purpose
Formative (Assessment FOR learning)	During teaching	Continuous feedback to improve learning and teaching; quizzes, observation, homework, discussion.
Summative (Assessment OF learning)	End of term/unit	Judge overall achievement; final/annual exams.
Diagnostic	Before/when problems appear	Identify specific learning gaps and difficulties; followed by remedial teaching.
CCE	Throughout	Continuous & Comprehensive Evaluation — assesses scholastic + co-scholastic areas; reduces exam stress.

Qualities of a good test

Validity	It measures what it is supposed to measure.
Reliability	It gives consistent results on repetition.
Objectivity	Different examiners score it the same way.
Usability	Practical to administer in time, cost and effort.

- Tools beyond written tests: observation, checklists, rating scales, **anecdotal records**, **portfolios** (collection of work over time), rubrics, projects, self- and peer-assessment.

• Good feedback is **timely, specific and constructive** — focused on the work, not the child's personality.

EXAM TIP: "Assessment for learning" = FORMATIVE. Portfolio = continuous progress over time. Valid vs reliable: validity = right thing, reliability = consistent result.

SECTION 2

Language Pedagogy

Language I & Language II — how children learn and how to teach languages · **30 + 30 Questions**

Chapter 9: Language Acquisition vs Language Learning

Acquisition	Natural, subconscious picking-up of language through meaningful exposure and use (how a child learns the mother tongue). No formal teaching needed.
Learning	Conscious, formal study of language rules — typical of classroom second-language study.
Chomsky's LAD	Language Acquisition Device — humans are born with an innate capacity to acquire language; explains why all children master complex grammar so early.
Krashen's input	Comprehensible input slightly above the learner's level ("i+1") drives acquisition; anxiety blocks it (affective filter).

Implications for the classroom

- Provide rich, meaningful exposure — stories, conversation, songs — not only rules.
- The **mother tongue is a resource and a bridge**, never a barrier; multilingualism is a cognitive asset.
- Errors (e.g., "goed" for "went") show **overgeneralization** — a natural sign of active rule-building, not failure.
- A low-anxiety, encouraging environment accelerates language growth.

EXAM TIP: "Goed/foots/mouses" = overgeneralization = natural developmental stage. Mother tongue in class = resource/bridge. These two answers repeat in nearly every CTET paper.

Chapter 10: The Four Language Skills (LSRW)

Skill	Type	How to develop it
Listening	Receptive	Stories, rhymes, songs, instructions, audio; develops first and is the foundation of all language.
Speaking	Productive	Conversation, role play, show-and-tell, recitation, discussion; accept errors gently.
Reading	Receptive	Picture reading → shared/guided reading → silent reading; loud reading builds pronunciation & fluency, silent reading builds speed & comprehension.
Writing	Productive	Pre-writing (drawing, patterns) → guided → free/creative writing; process approach: plan → draft → revise → edit → publish.

- Natural order of skills: **Listening** → **Speaking** → **Reading** → **Writing**.
- Reading methods: skimming = reading fast for the gist; scanning = locating specific information.
- Reading comprehension levels: literal (facts) → inferential (reading between lines) → evaluative/critical.

EXAM TIP: Skimming = overall idea; Scanning = specific detail. Receptive = listening & reading; Productive = speaking & writing.

Chapter 11: Methods & Approaches of Language Teaching

Method/Approach	Key features
Grammar-Translation	Rules + translation to mother tongue; reading/writing focus; little speaking. Oldest, least communicative.
Direct Method	Target language only; no translation; speech first; meaning through demonstration.
Audio-Lingual	Drills, repetition, pattern practice; habit formation (behaviourist).
Structural Approach	Graded sentence structures/patterns taught in sequence.
Communicative (CLT)	**Meaningful communication** over rules; pair/group work, role play, information-gap tasks; errors tolerated as part of learning; fluency before accuracy.
Total Physical Response	Language linked with body movement and actions; good for beginners.
Bilingual Method	Judicious use of mother tongue to support the target language.
Eclectic	Combining the best of several methods to suit learners.
Constructivist view	Learners construct language through use; teacher = facilitator; whole-language approach connects reading/writing with real, meaningful texts.

EXAM TIP: CTET's favourite correct answer is the **Communicative Approach** — real communication, meaning first, errors as learning. Grammar-Translation is almost always the "wrong/old" option.

Chapter 12: Teaching Grammar, Vocabulary & Comprehension

Grammar

- **Inductive method:** examples first → learners discover the rule (preferred at primary level).
- **Deductive method:** rule first → then examples and practice.
- At primary level grammar should be taught **informally, in context of use** — not as isolated rules and definitions.

Vocabulary

- Teach words in **meaningful context** — through stories, usage, pictures and actual use in sentences.
- Word walls, semantic maps, synonyms/antonyms, and repeated meaningful exposure beat rote word lists.

Comprehension & print awareness

- Pre-reading: activate prior knowledge and predict; While-reading: question and connect; Post-reading: retell, summarise, give a title, discuss.
- Good comprehension questions go beyond literal recall to inference, prediction and evaluation.
- Phonological awareness (sounds, rhymes) and print-rich environments build early literacy.

EXAM TIP: Primary-level grammar = informal + contextual + inductive. Vocabulary = context, never isolated lists. These phrasings are the correct options nearly verbatim.

Chapter 13: Assessment & Remedial Teaching in Language

- Assess **all four skills** (LSRW) with varied tools — oral tasks, reading records, portfolios, projects — not written grammar tests alone.
- Assessment should be continuous, low-stress and used to **improve learning** (formative).
- **Error analysis:** systematic study of learners' errors to understand their thinking and plan teaching; errors are windows into the learning process.
- Correction should be positive and encouraging — model the correct form (recasting) rather than scolding; over-correction silences learners.
- **Remedial teaching** follows diagnosis: targeted, varied-method support for specific gaps.
- Portfolios document growth in writing/reading over time; rubrics make criteria transparent.

EXAM TIP: "What should a teacher do when a child makes an oral error?" → gently model the correct form and continue communication. Never interrupt, punish or mock.

SECTION 3

Mathematics

Content (Classes I–V) plus pedagogy of teaching primary mathematics · **30 Questions**

Chapter 14: Numbers, Place Value & Operations

- **Natural numbers** start at 1; **whole numbers** include 0. Successor = +1, predecessor = –1.
- **Place value** = digit × position value (in 4,725 the 7 = 700); face value = the digit itself.
- Indian system: ones, tens, hundreds, thousands, ten-thousands, **lakh (1,00,000 — five zeros)**, crore (1,00,00,000).
- **Even** numbers divisible by 2; **odd** are not. **Prime** = exactly two factors (2,3,5,7,11,13,17,19,23…); 2 is the only even prime; 1 is neither prime nor composite. **Composite** = more than two factors.
- Divisibility: by 2 (even last digit), by 3 (digit-sum divisible by 3), by 5 (ends 0/5), by 10 (ends 0).
- Properties: addition/multiplication are commutative (a+b=b+a) and associative; a×0=0; a×1=a; a+0=a; a÷a=1 (a≠0).
- Roman numerals: I=1, V=5, X=10, L=50, C=100, D=500, M=1000 (XL=40, XC=90).

Worked micro-examples

- Place value of 9 in 9,450 = 9000; predecessor of 1000 = 999; one lakh has 5 zeros.
- 3,6,9,12,… (multiples of 3 — next 15); 5,10,20,40,… (doubling — next 80).

EXAM TIP: Watch the classic traps: 1 is NOT prime; 2 IS prime (only even one); place value ≠ face value.

Chapter 15: Fractions & Decimals

- A fraction = part of a whole. Numerator/denominator. Proper (3/4), improper (7/4), mixed (1¾).
- **Equivalent fractions:** multiply/divide top and bottom by the same number (2/4 = 1/2 = 3/6).
- Compare like denominators by numerator; unlike by making denominators common or cross-multiplying.
- Fraction of a quantity: 1/4 of 100 = 25; 2/3 of 30 = 20; 3/4 of 40 = 30.
- Decimals are fractions with denominators 10, 100, 1000 (0.7 = 7/10; 0.25 = 25/100 = 1/4).
- Compare decimals place by place: 0.99 > 0.9 > 0.09 > 0.009.
- Money & measures use decimals: ■7.50 = 7 rupees 50 paise; 1.5 m = 150 cm.

EXAM TIP: 15 minutes = 1/4 hour; 45 minutes = 3/4 hour; half = 0.5 = 50%. Fraction-of-quantity questions are pure multiplication.

Chapter 16: Geometry, Shapes & Symmetry

Concept	Essentials
Basic shapes	Triangle 3 sides; quadrilateral 4; pentagon 5; hexagon 6; circle has no straight side.

Concept	Essentials
Angles	Right = 90°; acute < 90°; obtuse between 90° and 180°; straight = 180°; reflex between 180° and 360°.
Triangles	Equilateral (3 equal sides, 3 lines of symmetry); isosceles (2 equal); scalene (none). Angle sum = 180°.
Perimeter	Distance around: square = 4×side; rectangle = 2(l+b); equilateral triangle = 3×side.
Area	Square = side²; rectangle = l×b. Units cm², m².
Symmetry	Square: 4 lines; rectangle: 2; equilateral triangle: 3; circle: infinite.
3-D solids	Cube: 6 faces, 12 edges, 8 corners; sphere, cylinder, cone — relate to dice, ball, can, ice-cream cone.

Worked micro-examples

- Square side 5 cm → area 25 cm², perimeter 20 cm; rectangle 8×3 → area 24 cm²; equilateral triangle side 6 → perimeter 18 cm.

EXAM TIP: Memorise the symmetry counts (square 4, rectangle 2, equilateral 3, circle infinite) and the angle ranges — direct one-line questions.

Chapter 17: Measurement — Length, Weight, Capacity, Time & Money

Length	10 mm = 1 cm; 100 cm = 1 m; 1000 m = 1 km.
Weight	1000 g = 1 kg; 1000 kg = 1 tonne.
Capacity	1000 mL = 1 L.
Time	60 s = 1 min; 60 min = 1 h (3600 s); 24 h = 1 day; 7 days = 1 week; 12 months = 1 year; 365/366 days.
Money	100 paise = ■1; cost problems = multiplication/division with real prices.

- Half hour = 30 min; quarter hour = 15 min; dozen = 12; score = 20; dozen-and-a-half = 18; two dozen = 24.
- Reading clocks and calendars (days, dates, months) is a Class I–III competency; estimation before measuring is good pedagogy.

EXAM TIP: Unit-conversion one-liners are free marks: 1 m = 100 cm, 1 L = 1000 mL, 1 h = 3600 s. Practise till instant.

Chapter 18: Data Handling & Patterns

- Data is collected, organised (tally marks, tables) and displayed (pictographs, **bar graphs** for comparison, **pie charts** for parts of a whole).
- Reading a graph: check the scale first; compare heights; find totals and differences.
- Patterns: growing patterns (2,4,6,8…), shape patterns, number machines; recognising the rule develops algebraic thinking.
- Simple chance language at primary level: certain, possible, impossible.

EXAM TIP: Bar graph = comparing quantities; pie chart = parts of a whole; pictograph = pictures with a key. Match the tool to the purpose.

Chapter 19: Pedagogy of Mathematics

- Mathematics learning moves **concrete** → **pictorial** → **abstract**: objects and manipulatives first, then pictures, then symbols.
- **Number sense** grows through real counting, bundling (tens/ones), abacus, currency and games — not rote drills.
- Errors reveal the child's thinking: analyse the wrong **method**, then correct the concept (constructivist view). Never punish errors.
- Word problems connect maths to **real-life situations**; encourage estimation to check reasonableness of answers.
- Maths anxiety is reduced by supportive, activity- and game-based teaching, discussion and low-stakes assessment — not by speed tests.
- Use of mathematical language and reasoning ("why does this work?") matters as much as the answer (NCF emphasis on mathematisation).
- Assessment: observation, oral work, projects and portfolios alongside written work.

EXAM TIP: Pedagogy answers: concrete→abstract, real-life connection, error analysis, no fear. Whenever an option says "rote/drill/punish", it is wrong.

SECTION 4

Environmental Studies (EVS)

Themes of family, food, water, shelter, travel, plants, animals and the body — plus EVS pedagogy · **30 Questions**

Chapter 20: Family, Friends & Relationships

• Family is the child's **first school**; primary agent of socialisation; types: nuclear and joint.

• Relationships vocabulary (grandparents, cousins, maternal/paternal) and family trees feature in Class III–V EVS.

• Values: cooperation, care for elders, sharing of work without gender stereotyping (boys and girls share housework).

• Games and play teach rules, teamwork and motor skills; traditional games are part of our heritage.

• Festivals (Holi colours, Baisakhi/Pongal harvest, Diwali lamps, Eid) reflect cultural diversity — EVS values respect for all.

EXAM TIP: EVS themes always favour answers showing equality, diversity-respect and no gender stereotyping.

Chapter 21: Food, Water, Shelter & Travel

Food

• Sources: plants (grains, pulses, fruits, vegetables) and animals (milk, eggs, honey from bees).

• Balanced diet: carbohydrates (energy), proteins (growth), fats, vitamins & minerals (protection), fibre and water. Vitamin C from citrus (orange, amla).

• Cover food to keep it safe from flies; do not waste food — many people do not get enough.

Water

• Sources: rain, rivers, ponds, wells, groundwater. Safe drinking water = filtered/boiled.

• States of water: ice (solid) ■ water (liquid) ■ steam (gas). Evaporation (liquid→gas), condensation (gas→liquid), freezing, melting — the **water cycle**.

• Save water; keep sources clean to prevent diseases (diarrhoea, cholera).

Shelter & Travel

• Houses suit climate: sloping roofs (heavy rain), stilt houses (floods, Assam), houseboats (Kashmir), igloo (snow), tents (nomads).

• Animal homes: nest (bird), hive (bee), stable (horse), kennel (dog), burrow (rabbit), den (lion).

• Transport: land/water/air; boat on water, aeroplane fastest; CNG and solar are cleaner fuels; the camel is the "ship of the desert".

EXAM TIP: Match-the-following sets (animal–home, festival–state, house–region) are common — revise these mappings as pairs.

Chapter 22: Plants & Animals

Plants

- Parts: root (anchors, absorbs water), stem (transports), leaf (makes food), flower (becomes fruit/seed).
- **Photosynthesis:** leaves use sunlight, water and **carbon dioxide** to make food and release oxygen.
- **Transpiration:** release of water vapour from leaves.
- Desert plants (cactus) have spines and store water; root vegetables: radish, carrot; leafy: spinach.

Animals

- Groups: mammals (cow — give birth, milk), birds (ostrich cannot fly; owl is nocturnal), reptiles (snake, lizard, crocodile), amphibians (frog — land + water), insects (6 legs; spider has 8 and is not an insect).
- Special features: fish breathe through **gills**; camel stores fat for deserts; chameleon changes colour; kangaroo has a pouch; penguin/polar regions; migration of birds for food and climate.
- Teeth: incisors cut, canines tear, molars chew. Brushing twice daily protects teeth.
- Conservation: plant trees (clean air), protect forests (Chipko movement), national animal tiger, national bird peacock, national flower lotus.

EXAM TIP: Photosynthesis gas IN = carbon dioxide, OUT = oxygen; breathing OUT = carbon dioxide. Insects = 6 legs (spider 8). These swap-traps are frequent.

Chapter 23: Our Body, Health & Hygiene

Sense organs	Eyes—see, ears—hear, nose—smell, tongue—taste, skin—touch.
Key organs	Brain—controls body & thinking; heart—pumps blood; lungs—breathing; stomach—digestion; liver—largest gland; kidneys—filter blood.
Bones & muscles	Skeleton gives shape and protects organs; joints allow movement.
Healthy habits	Wash hands before eating, brush twice daily, balanced diet, exercise & play, adequate sleep, clean drinking water.
Diseases	Mosquito-borne: malaria, dengue (stagnant water breeding); water-borne: cholera, typhoid, diarrhoea; deficiency: scurvy (Vit C), night blindness (Vit A), anaemia (iron).

EXAM TIP: Deficiency pairs: Vitamin A—night blindness, Vitamin C—scurvy, Vitamin D—rickets, Iron—anaemia, Iodine—goitre. Learn as flashcards.

Chapter 24: Pedagogy of EVS

- EVS at primary level is an **integrated** area — science + social studies + environmental education woven around the child's real surroundings.
- Learning should start from the **child's immediate environment** and lived experience, moving from local to global.
- Core methods: **observation, exploration, activities, experiments, field trips, surveys, discussion, storytelling** — learning by doing.

• Themes (NCF): Family & Friends; Food; Shelter; Water; Travel; Things We Make & Do — concepts spiral upward across classes.

• Use the local context, community and family as learning resources; connect lessons to daily life (markets, weather, festivals).

• Develop process skills: observing, classifying, questioning, recording, inferring — not memorising facts.

• Assessment: observation records, projects, field reports, portfolios, group work — continuous and stress-free.

• Values dimension: care for environment (save water, plant trees, no littering), sensitivity to diversity and equality.

EXAM TIP: EVS pedagogy answers: real surroundings, exploration, integrated themes, learning by doing. "Textbook memorisation" options are always wrong.

How to Use This Material

- Read one chapter at a time and immediately attempt related questions in the Zenith Educare mock tests.
- Revise the EXAM TIP boxes a day before the exam — they compress the highest-frequency facts.
- Make your own one-page notes per chapter; active recall beats re-reading.
- Attempt all 10 Paper I mock tests at zenitheducare.com under timed conditions (150 questions · 2.5 hours).

Best wishes for CTET September 2026!

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