

TANCET & CEETA-PG 2026

COMPLETE SYLLABUS

Prepared by: Team MyPath Date: December 2025

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TANCET 2026 SYLLABUS

EXAM OVERVIEW

Particulars	Details
Exam Name	Tamil Nadu Common Entrance Test (TANCET 2026)
Conducting Body	Anna University, Chennai
Courses Covered	MBA and MCA
Exam Mode	Offline (Pen and Paper)
Total Questions	100
Total Marks	100
Exam Duration	2 hours (120 minutes)
Marking Scheme	+1 for correct; -1/3 for incorrect

TANCET MBA SYLLABUS 2026

SECTION-WISE BREAKDOWN

1. ANALYSIS OF BUSINESS SITUATIONS (25% Weightage)

Key Topics:

- Case analysis and decision-making based on business data
- Business graphs and charts interpretation
- Prioritization of options
- Data-driven business scenarios
- Financial ratio analysis
- Profit-loss decisions
- Market trend interpretation
- Production data analysis

Question Type: Caselets followed by MCQs (3-4 options) **Average Questions:** 20 out of 100

2. READING COMPREHENSION & VERBAL ABILITY (25% Weightage)

Key Topics:

- Reading comprehension passages (business-focused)
- Vocabulary and word usage
- Synonyms and antonyms
- Fill in the blanks
- Grammar and sentence correction
- Idioms and phrases
- One-word substitution
- Cloze test
- Logical inference from passages
- Author's tone identification
- Fact vs. opinion distinction

Sub-sections:

- Reading Comprehension: 15 questions
- Verbal Ability & Grammar: 5 questions

3. QUANTITATIVE APTITUDE (25% Weightage)

Key Topics:

- **Number System:** Whole numbers, decimals, fractions, divisibility, HCF, LCM
- **Arithmetic:** Percentages, ratios, proportions, averages
- **Interest:** Simple interest, compound interest, installments
- **Time & Work:** Work rate problems, pipe & cistern
- **Time, Speed & Distance:** Average speed, relative speed, trains
- **Profit & Loss:** Cost price, selling price, discounts, markups
- **Algebra:** Linear equations, quadratic equations, inequalities
- **Geometry:** Angles, triangles, circles, polygons
- **Permutation & Combination:** Arrangements, selections

- **Probability:** Theoretical probability, compound events

4. DATA SUFFICIENCY (15% Weightage)

Key Topics:

- Number systems and arithmetic application
- Data interpretation (charts, graphs, tables)
- Statement evaluation
- Combined statement analysis

5. ENGLISH USAGE (10% Weightage)

Key Topics:

- **Grammar:** Parts of speech, tenses, subject-verb agreement
 - **Punctuation:** Commas, semicolons, apostrophes
 - **Error Detection:** Spotting errors in sentences
 - **Articles & Prepositions:** Usage rules
 - **Voice & Mood:** Active-passive transformation
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TANCET MCA SYLLABUS 2026

SECTION-WISE BREAKDOWN

1. MATHEMATICS (40% Weightage)

Key Topics:

- **Sets & Relations:** Set notation, operations, relations, functions
- **Matrices & Determinants:** Matrix operations, inverse, determinants
- **Linear Algebra:** Eigenvalues, eigenvectors, rank of matrix
- **Calculus:** Limits, continuity, derivatives, integration
- **Differential Equations:** First-order linear, second-order equations
- **Vector Calculus:** Gradient, divergence, curl
- **Complex Numbers:** Complex arithmetic, polar form
- **Transforms:** Laplace, Fourier, Z-transforms
- **Numerical Methods:** Root finding, interpolation
- **Probability & Statistics:** Distributions, hypothesis testing

Question Count: 35-40 out of 100

2. COMPUTER SCIENCE (40% Weightage)

Key Topics:

- **Programming in C:** Syntax, control structures, functions, pointers
- **Data Structures:** Arrays, linked lists, stacks, queues, trees, graphs
- **Algorithms:** Sorting, searching, dynamic programming
- **Database Management:** SQL, ER diagrams, normalization
- **Operating Systems:** Process management, memory management
- **Computer Networks:** Protocols, TCP/IP, routing
- **Computer Architecture:** CPU design, instruction sets
- **Digital Logic:** Boolean algebra, circuits
- **Microprocessors:** 8085, 8086 architecture
- **Software Engineering:** SDLC, design patterns

Question Count: 35-40 out of 100

3. LOGICAL REASONING (10% Weightage)

Key Topics:

- Alphanumeric series and pattern recognition
- Coding-decoding
- Blood relations and family trees
- Analogies and relationships
- Syllogisms and logical inference
- Seating arrangements
- Direction sense and ranking

Question Count: 10 out of 100

4. COMPUTER AWARENESS (10% Weightage)

Key Topics:

- **Hardware:** CPU, memory, storage devices
- **Software:** Operating systems, applications
- **Networking:** LAN, WAN, internet protocols
- **Security:** Passwords, encryption, firewalls
- **Input/Output Devices:** Keyboard, mouse, printers

Question Count: 10 out of 100

CEETA-PG 2026 SYLLABUS

Conducted by: Anna University **Programs:** M.Tech, M.E, M.Arch, M.Plan **Exam Pattern:** 3 parts (I, II common to all; III discipline-specific)

PART I: ENGINEERING MATHEMATICS

Topics Covered:

1. DETERMINANTS & MATRICES

- Solving systems of linear equations
- Rank of matrix and elementary transformations
- Eigenvalues and eigenvectors
- Reduction of quadratic forms to canonical form
- Matrix inversion methods

2. CALCULUS & DIFFERENTIAL EQUATIONS

- Partial derivatives and total derivatives
- Jacobians and implicit differentiation
- Taylor's expansion and Maclaurin series
- Maxima and minima of multivariable functions
- Differential equations (homogeneous, non-homogeneous)
- Linear ODEs with constant coefficients
- Partial differential equations

3. VECTOR CALCULUS

- Scalar and vector fields
- Gradient, divergence, curl operators
- Multiple integrals and applications
- Green's theorem, Gauss divergence theorem, Stokes' theorem
- Line and surface integrals

4. COMPLEX VARIABLES

- Analytic functions and Cauchy-Riemann equations
- Conformal mapping
- Cauchy's integral theorem and formula
- Taylor and Laurent series
- Residues and residue theorem

5. TRANSFORMS

- **Laplace Transform:** Definition, properties, inverse
- **Fourier Series:** Fourier integral theorem
- **Z-Transform:** Properties, inverse Z-transform

6. NUMERICAL METHODS

- Linear system solutions (Gaussian elimination, iterative methods)
- Interpolation techniques
- Numerical differentiation and integration
- ODE solutions (Euler, Runge-Kutta methods)

7. PROBABILITY & STATISTICS

- Probability distributions
 - Random variables and standard distributions
 - Moments and moment generating functions
 - Covariance and correlation
 - Linear regression
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PART II: BASIC ENGINEERING & SCIENCES

Topics Covered:

1. APPLIED MECHANICS

- Newton's laws and equilibrium
- Forces, moments, and couples
- Displacement, velocity, acceleration
- Friction and moments of inertia

2. PHYSICS

- **Acoustics:** Sound propagation, absorption
- **Quantum Theory:** Planck's hypothesis, photoelectric effect
- **Optics:** Interference, diffraction, polarization
- **Laser & Fiber Optics:** Basic principles
- **X-ray Radiography:** Production and applications

3. MATERIALS SCIENCE

- **Fracture Mechanics:** Stress concentration
- **Magnetic Materials:** Ferromagnetism, paramagnetism
- **Dielectric Materials:** Polarization, breakdown
- **Ceramic Materials:** Structure and properties
- **Superconductors:** Critical temperature

4. ELECTRICAL ENGINEERING BASICS

- **Electrical Circuits:** Ohm's law, Kirchhoff's laws

- **AC Circuits:** Impedance, power factor, resonance
- **DC Machines:** Generators and motors
- **Transformers:** Single and three-phase
- **Synchronous Machines:** Generator and motor operation

5. COMPUTERS

- **Computer Organization:** ALU, registers, buses
- **Architecture:** CPU design, memory hierarchy
- **Data Structures:** Arrays, linked lists, pointers
- **C Programming:** Control structures, functions

6. CHEMISTRY

- **Chemical Kinetics:** Rate laws, catalysis
 - **Electrochemistry:** Electrodes, potentials
 - **Spectroscopy:** UV-Vis, IR, NMR principles
 - **Fuels & Combustion:** Energy content
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PART III: DISCIPLINE-SPECIFIC SYLLABUS

MAJOR BRANCHES COVERED:

1. CIVIL ENGINEERING

- **Structural Engineering:** Stress-strain, beams, torsion, columns
- **Structural Analysis:** Indeterminacy, energy methods
- **Building Materials:** Cement, concrete, steel, timber
- **Concrete Structures:** Limit state design, design of elements
- **Soil Mechanics:** Classification, permeability, shear strength
- **Foundation Engineering:** Shallow and deep foundations
- **Transportation Engineering:** Highways, railways, airports
- **Water Resources:** Hydrology, open channel flow, dams
- **Environmental Engineering:** Water supply, wastewater, pollution
- **Surveying:** Chain, compass, leveling, theodolite surveying

2. COMPUTER SCIENCE & ENGINEERING

- **Discrete Structures:** Automata, graph theory, Boolean algebra
- **Compiler Design:** Lexical, syntax, semantic analysis
- **Operating Systems:** Process management, memory, file systems
- **Distributed Systems:** Communication, synchronization

- **Data Structures:** Trees, graphs, hashing, heaps
- **Algorithms:** Sorting, searching, dynamic programming
- **Microprocessors:** 8085, 8086 architecture
- **Computer Networks:** Layers, protocols, security
- **Database Systems:** Relational model, SQL, optimization
- **Software Engineering:** SDLC, design patterns, testing
- **Artificial Intelligence:** Search, knowledge representation
- **Security:** Cryptography, network security

3. ELECTRICAL ENGINEERING

- **Electrical Circuits & Fields:** Network theorems, AC circuits
- **Electrical Machines:** Transformers, generators, motors
- **Power Systems:** Generation, transmission, protection
- **Control Systems:** Transfer functions, stability, compensation
- **Power Electronics:** Rectifiers, choppers, inverters
- **Microprocessors:** Architecture and programming
- **Digital Signal Processing:** Sampling, Z-transform, filters
- **High Voltage Engineering:** Overvoltages, breakdown, testing
- **Energy Conservation:** Efficiency, lighting, heating

4. ELECTRONICS & COMMUNICATION

- **Circuit Analysis:** Theorems, transient analysis
- **Electronic Devices:** Diodes, transistors, thyristors
- **Digital Electronics:** Logic gates, circuits, memory
- **Linear ICs:** Op-amps, filters, regulators, ADC/DAC
- **Electromagnetic Fields:** Static and time-varying fields
- **Transmission Lines:** Equations, reflection, impedance matching
- **Waveguides:** TE, TM modes, components
- **Antennas:** Characteristics, arrays, propagation
- **Microwave Engineering:** Tubes, devices, measurements
- **Communication Systems:** Modulation, digital communication
- **Optical Communication:** Fibers, sources, detectors

5. MECHANICAL ENGINEERING

- **Mechanics:** Statics, kinematics, kinetics, vibrations
- **Strength of Materials:** Stress-strain, beams, torsion, columns
- **Machine Elements:** Shafts, gears, bearings, springs
- **CAD/CAM:** Modeling, CNC, FEA
- **Materials Science:** Phase diagrams, heat treatment
- **Production Technology:** Casting, forming, welding, machining
- **Thermodynamics:** Laws, cycles, properties
- **Heat Transfer:** Conduction, convection, radiation
- **Fluid Mechanics:** Properties, statics, dynamics, pumps

6-14. OTHER BRANCHES

- **Automobile Engineering:** Mechanics, transmission, engines, emissions
 - **Aeronautical Engineering:** Aerodynamics, flight mechanics, structures
 - **Architecture:** Materials, history, design, building services
 - **Agricultural Engineering:** Machinery, power, irrigation
 - **Biotechnology:** Bioprocess, molecular biology, genetic engineering
 - **Biomedical Engineering:** Signals, instrumentation, imaging
 - **Chemical Engineering:** Fluid mechanics, heat transfer, reactors
 - **Food Technology:** Science, processing, quality
 - **Textile Technology:** Fibers, yarn, fabric, dyeing
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EXAMINATION STRUCTURE

CEETA-PG Exam Format:

- **Total Questions:** Varies by branch
- **Exam Type:** Multiple Choice Questions (MCQ)
- **Exam Duration:** 3 hours
- **Total Marks:** Typically 300 marks
- **Negative Marking:** Usually -1 mark for wrong answer

Weightage Distribution:

- **Part I (Engineering Mathematics):** 20-25%
 - **Part II (Basic Engineering & Sciences):** 20-25%
 - **Part III (Discipline-Specific):** 50-60%
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STUDY TIMELINE RECOMMENDATIONS

3-Month Preparation Plan:

- **Month 1:** Foundation building in Mathematics and core concepts
- **Month 2:** Depth study in discipline-specific topics
- **Month 3:** Revision, practice papers, final strengthening

6-Month Preparation Plan:

- **Months 1-2:** Foundation and advanced concepts
 - **Months 3-4:** Detailed topic-wise study
 - **Months 5-6:** Practice, revision, mock tests
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IMPORTANT NOTES

1. **Syllabus Updates:** Always refer to official Anna University website for latest updates
 2. **Mock Tests:** Solve at least 20-30 full-length practice papers
 3. **Previous Papers:** Practice from 5-10 years of previous question papers
 4. **Time Management:** Focus equally on all three parts for CEETA-PG
 5. **Reference Books:** Use standard books recommended for each subject
 6. **Doubts Clarification:** Clear concepts from subject experts regularly
 7. **Health Management:** Maintain proper sleep and nutrition during preparation
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USEFUL RESOURCES

Official Websites:

- **TANCET:** www.tancet.annauniv.edu (<http://www.tancet.annauniv.edu>)
- **CEETA-PG:** www.annauniv.edu (<http://www.annauniv.edu>) (CEETA-PG section)

Reference Materials:

- Standard engineering textbooks
- Previous year question papers
- Online coaching platforms
- Study groups and forums

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This comprehensive syllabus document has been prepared to assist students in their TANCET and CEETA-PG 2026 preparation. All information is based on official notifications and guidelines from Anna University. Students are advised to verify with official sources for the most current information.
