TN TRB Graduate Teacher Exam Pattern

Subjects	No of Questions	No of Marks	Duration
Compulsory Tamil Language Eligibility Test - Tamil Language	30	50	30 minutes
Concerned Subject (Tamil, Mathematics, English, Physics, Chemistry, Zoology, Botany, History and Geography)	150	150	3 hours
Total	180	200	3.30 Hours

TN TRB BRTE Exam Syllabus - Topic Wise

English

- History of the English Language
- Linguistics
- Prose, Drama, Poetry
- Shakespeare
- Modern Literature (1400 to present day)
- Approaches to Literature
- American Literature
- Indian Writing in English
- Principles of Literary Criticism

Maths

- Algebra
- Operations Research
- Functional & Complex Analysis
- Real Analysis
- Differential Geometry & Equations
- Fourier series and Fourier Integrals
- Statistics I, II

Tamil

- Prose
- Poetry
- Grammar, etc

History

- First and Second World War, Cold War, etc
- Industrial, Agrarian, French, and Russian revolutions

- Jainism and Buddhism
- Mughals
- Harappan civilization
- Integration of Indian States
- Foundation of British rule in India
- Arab conquest of Sindh and Muslim invasions slave dynasty
- Great Mutiny 1857

Physics

- Electronics (Digital)
- Probability and Theory of Errors
- Classical mechanics
- Statistical Mechanics
- Vector Fields
- Solid State Physics
- Quantum mechanics
- Nuclear Physics
- Electromagnetic theory
- Spectroscopy

Botany

- Anatomy and Embryology
- Morphology, Taxonomy, and Economic Botany
- Plant Pathology and Microbiology
- Bryophytes, Pteridophytes and Gymnosperms
- PalaeoBotany and General Principles
- Viruses, Bacteria, Thallophytes and Lichens
- Cell Biology and Genetics
- Ecology and Phyto-geography
- Plant Breeding and Biotechnology
- Plant Physiology and Biochemistry

Chemistry

- Conformational analysis
- Organic reaction mechanisms
- Heterocyclics
- Non-aqueous solvents
- Application of Schrodinger equation, radioactivity
- Periodic properties
- VB theory, MO theory, and its applications
- Solid state and coordination chemistry, properties
- Old quantum theory
- Thermodynamic equations of state

- Theory and applications of spectroscopic methods, reaction rates, etc
- Optical activity and concept of chirality
- Organometallic compounds

Zoology

- Antigens and Antibodies
- Physiology, Nutrition
- Cell and Molecular Biology
- Classification Binomial Nomenclature
- Role of minor and major elements in metabolism enzymes
- Genetics-Gene Interactions
- Evolution
- Biological Chemistry
- Man and Biosphere

Geography

- Environmental Studies
- Geography of India
- Quantitative Techniques in Geography
- Geography of Resources & Industries
- Regional Analysis
- Landforms
- Climatology
- Population & Settlement
- Thematic Cartography
- Geography of Tamil Nadu