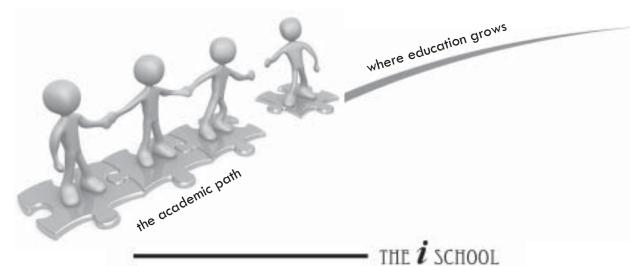


Director Dr. K. Krishna Kishore, M.S.(Ortho) {A.P. Medical Council No.50154} has given up his Orthopedics practice and has been working in the Academic Field for the Upliftment of school children for the past 7 years in Ratnam group of schools.



RATNAM TECHNOL SCHOOL

i for intelligence. i for iit

CLASSES VI - IX

Office: Plot No. 77, 2nd Floor, Opp. Nijampet Road, Sai Nagar, Kphb, Hyderabad. Ph.: 9299993039, 9291375701, 040 - 65694199.



AIM and OBJECTIVES

AIM:

The aim of IX TECHNO is to prepare the students for competitive exams.

Preparation for competitive exams will ease the pressure of academics in their

Intermediate education.

OBJECTIVES:

- Target IIT-JEE and similar competitive exams.
- To foster the analytical, applicative and resoning skills.
- To enhance their English language skills.
- Target Numerical Physics.
- Goal 10th score.

Why class IX in Ratnam Techno?

- because the M.P.C. (Maths, Physics, Chemistry) programme is dealt by Eminent Faculty which helps the students to master the fundamentals in those subjects.
- because it adapts question papers based on analytical skills which help the students to think and believe in ways that encourage intellectual growth, scientific temperament.
- because it follows the model of IIT-JEE question papers.
- because it has MENTAL ABILITY in their curriculum.
- because it builds confidence and develops fundamentals to face the numerical challenges in Physics and Chemistry.



CURRICULUM of Class IX Techno

Integrated ICSE, CBSE and STATE BOARD syllabus is followed.

MATHS Topic wise text books

- 1) Arithmetic 2) Exponents and Algebraic expressions
- 3) Square roots of Algebraic expressions 4) Sets 5) Relations
- 6) Linear equations and inequations 7) Matrices
- 8) Geometry 9) Motion (Transformation) Geometry
- 10) Statistics 11) Computing

PHYSICS

- 1) Measurement and Experimentation 2) Motion in one dimension
- 3) Laws of motion 4) Fluids 5) Heat 6) Light
- 7) Sound 8) Electricity and Magnetism. 9) Numerical Physics

CHEMISTRY

- 1) Matter and its composition: Law of conservation of mass 2) Study of gas laws
- 3) Elements, Compounds and mixtures 4) The language of chemistry
- 5) Physical and chemical changes 6) Water 7) Atomic structure
- 8) Periodic table 9) Study of the first element-Hydrogen.
- 10) Numerical Chemistry

BIOLOGY Class X ICSE

- 1) Basic Biology 2) Cell structure
- 3) Cell division and structure of chromosome
- 4) Heredity: Fundamentals of Genetics 5) Osmosis and Ascent of sap
- 6) Transpiration 7) Photosynthesis 8) The Nervous system and sense organs
- 9) The endocrine system 10) The reproductive system 11) Population
- 12) Aids to Health; Health Organisations: First Aid.

MENTAL ABILITY: Higer end Reasoning questions are taught

ENGLISH: (Refer to the programme mentioned in later pages)

HINDI: Class X State Board (covering literature and grammar)

TELUGU: Class X State Board (covering of literature and grammar)

SOCIAL: Class X State Board



TARGET IIT - JEE MATERIALS

PHYSICS AND CHEMISTRY

- We have introduced world class materials that would help the children in mastering the required skills to face the competitive exams.
- These materials also help the children to learn strong fundamentals in the topic.

LESSON WISE TARGET IIT – JEE MATERIALS

- For every lesson in Physics & Chemistry, IIT JEE targeting material is given.
- We can proudly say that such materials aren't found anywhere.

Content of Each Lesson Material

- 1) SUMMARY For IIT JEE
 - Questions to review the summary
- IIT JEE MODEL QUESTIONS

Competitive model assessment based on IIT – JEE, AIEEE and EAMCET

QUESTIONS BASED ON CONCEPTS

- Multiple answer Multiple choice questions
- Statement questions
- Assertion and Reason questions
- Matching (matrix matching, three column matching etc.)
- Linked Comprehension questions
- True or False Statement questions

NUMERICAL BASED QUESTIONS (wherever necessary)

- Working out Numericals
- Objective Numericals based on Target IIT JEE.
- **BRAIN STORMING QUESTIONS**
 - Reasoning questions
 - Rewrite the false statements
 - Matching
- 4) OBJECTIVE CONCEPT QUESTIONS
 - Fill in the blanks
 - Multiple Choice Questions (MCQs)
- 5) COMPREHENDING THE CONCEPTS IN THE LESSON

 - Study questions Textbook reading programme
- **DIAGRAM BASED QUESTIONS**
 - THINKING SKILLS QUESTIONS
 - 8) LAB ACTIVITY
 - 9) DRAWING SKILLS

- Comprehension type questions 0
- Completing the tables
- True or False questions



TARGET IIT - JEE MATERIALS

MATHEMATICS

- We have introduced TOPIC WISE TEXT BOOKS.
- These books are titled as MATHS IN SCHOOL.

MATHS IN SCHOOL

We all know that MATHS is the trickiest subject in school education. It is because, there are lots of concepts involved in solving the problems. The child should not miss any concept. He/she should learn or must be given exposure to all types of maths concepts in each topic. And more than anything MATHS is the subject which is **learnt through practice**. But the practice should be planned meticulously.

We, at Saraswathinagar RATNAM conducted a **research** in trying to make **maths** easy to both learn and workout. We conducted a number of workshops for teachers and gathered information from the students to bring out a revolution, never heard of in the history of Andhra Pradesh education, in the form of "MATHS IN SCHOOL" [Topic wise TEXTBOOK cum WORKBOOKS] and "MATHS AT HOME" [Hometask books]. The benefits from these books are tremendous.

- These books cater not only to the needs of merit students and average students but also of slow learners.
- Read the following to know the importance of these books:
 - o Conceptually constructed lessons.
 - o Information regarding what is happening in MATHS at your child's school.
 - o Information on how MATHS is taught in the school.
 - o Maintenance of too many Notebooks is absent. Burden of carrying note books is decreased to the bare minimum.
 - o Referring to the Maths Notebooks during Examinations is very easy.
 - o What to do for Homework (task) is clearly demarcated and parents will have a clear idea.
 - o Check over the teachers is very much possible.

IIT-JEE MATHS MODEL QUESTIONS

- For each lesson, a complete question bank following IIT-JEE model is given.
- ➤ The Maths IIT-JEE question bank is given in a booklet form.
- > Summary of the concepts are included at the beginning.
- These IIT-JEE model questions are dealt in detail at the end of each lesson.
- > The model questions followed are:
 - Multiple answer Multiple choice questions
 - Assertion and Reason questions
 - Assertion and Reason questions
 - Ascending or Descending order type questions True or False statement questions
- Statement questions
 Linked Comprehension que
- Linked Comprehension questions
 - Matching (matrix matching, three column matching etc.)
 - Data Sufficiency type questions (unique feature of our school)



TARGET MEDICAL MATERIAL

BIOLOGY

- To give the students an option to choose even the MEDICAL stream, Biology is also given equal importance as MPC.
- This is a unique feature of our Techno School.
- The class X ICSE Biology is taught.

MEDICAL FOUNDATION MATERIAL

• To prepare the students for MEDICAL based competitive exams, such as EAMCET, AIIMS, AFMC etc., a state of art medical foundation material is provided to the students.

Topic Wise Materials

Here too, the materials are given as TOPIC WISE.

Content of Each Lesson Material

- SUMMARY For MEDICAL FOUNDATION
 - Questions to review the summary
- MEDICAL EXAMS MODEL QUESTIONS Competitive model assessment based on EAMCET, AIIMS, AFMC etc.
 - o QUESTIONS BASED ON CONCEPTS
 - Multiple answer Multiple choice questions
 Statement questions
 - Assertion and Reason questions
 - Matching (matrix matching, three column matching etc.)
 - Linked Comprehension questions
- True or False Statement questions
- BRAIN STORMING QUESTIONS
 - Reasoning questions
- Spot the dissimilar word and give reason
- Rewrite the false statements
- Comprehension type questionsCompleting the tables

- Matching
- OBJECTIVE CONCEPT QUESTIONS
- True or False questions
- o Multiple Choice Questions (MCQs)
- COMPREHENDING THE CONCEPTS IN THE LESSON
 - Study questions

Fill in the blanks

- Textbook reading programme
- > DIAGRAM BASED QUESTIONS
 - > THINKING SKILLS QUESTIONS
 - ► LAB ACTIVITY
 - DRAWING SKILLS



TARGET LANGUAGE MATERIALS

ENGLISH MATERIAL

(Refer to the programme mentioned in later pages)

TELUGU AND HINDI MATERIAL

- Class 10 syllabus is taught.
- Telugu and Hindi material is based completely on:

Literature

Grammar

Writing practice sheets

SOCIAL

- A comprehensive subjective and objective material is given.
- Map pointing skills are taught.



INTERNAL EXAMINATIONS

• 5 MODULES of INTERNAL EXAMINATIONS are followed

MODULE 1: WEEKLY IIT-JEE TARGET TEST (MPC)

MODULE 2: RITE (RATNAM IIT TARGET EXAMINATIONS)

MODULE 3: WEEKLY SUBJECTIVE TEST

MODULE 4: UNIT TESTS

MODULE 5: TERMINAL EXAMINATIONS

MODULE 1: WEEKLY IIT-JEE TARGET TEST (MPC)

 IIT-JEE and MEDICAL model questions are followed on the week's portions.

• OMR sheet answering.

MODULE 2: RITE (RATNAM IIT TARGET EXAMINATIONS)

- Total 10 tests are conducted in a year
- The question paper is based on IIT-JEE model as well as MEDICAL model.
- OMR sheet answering.
- AWARDS are distributed for the meritorious students.

MODULE 3: WEEKLY SUBJECTIVE TEST

• Every week, one subjective test is conducted on one the subjects (M.Bi.P.C)

MODULE 4: UNIT TESTS (ALL SUBJECTS)

- A good amount of portion is included in the unit tests
- These tests are completely based on **ANALYTICAL SKILLS** of the student

MODULE 5: TERMINAL EXAMINATIONS

Quarterly, Half-yearly and Annual examinations

- Term portion is included in these examinations.
- Annual exam includes the complete portion in selected subjects.
- These tests are completely based on ANALYTICAL SKILLS of the student



PATTERN OF INTERNAL EXAMINATIONS

UNIT TESTS & TERMINAL EXAMINATIONS

PHYSICS & CHEMISTRY

- Two papers are set in each subject.
- Each paper is divided into two parts.
 - o Paper 1: CONCEPTUAL
 - Part A: Subjective Part B: Objective
 - o Paper 2: NUMERICAL
 - Part A: Subjective Part B: Objective

Model of Conceptual paper: (Both subjective and objective)

- We follow MODEL OF ASSESSEMENT, AUSTRALIA.
- The model is completely based on ANALYTICAL SKILLS.
- Text book reading and careful listening and understanding of the class teaching is essential to answer these questions.
- The questions are based on the following skills (sections):
 - Observing, Measuring
 - Inferring, Predicting, Concluding
 - Interpretation (Visual, Data, Graphs etc.)
 - Investigating
 - Reasoning & Problem solving
 - Comprehension
 - Memory based
 - Diagram skills

Model of Numerical paper

- We have introduced NUMERICAL paper to boost up the numerical and logical thinking and enhance the numerical skills.
- Variety of models are given.
- In this paper both working out problems as wells as objective problems are given



PATTERN OF INTERNAL EXAMINATIONS

MATHS

- Maths consists of Two papers.
- Portions for each paper are different.
- Each paper has two parts.
 - o Part A: Subjective

Part B: Objective

- The questions set are not at all taken from their text books.
- Many brain storming questions are given.
- The papers are based on the following skills:
 - o Conceptual Theoretical questions
 - o Mathematical Reasoning questions
 - o Every day Applicative model questions

BIOLOGY

- The conceptual question paper has two parts.
 - o Part A: Subjective

Part B: Objective

Model of Conceptual paper: (Both subjective and objective)

- We follow MODEL OF ASSESSEMENT, AUSTRALIA.
- The model is completely based on ANALYTICAL SKILLS.
- Text book reading and careful listening and understanding of the class teaching is essential to answer these questions.
- The questions are based on the following skills (sections):
 - Observing, Measuring
 - Inferring, Predicting, Concluding
 - Interpretation (Visual, Data, Graphs etc.)
 - Investigating
 - Reasoning & Problem Solving
 - Comprehension
 - Memory based
 - Diagram skills

LANGUAGES AND SOCIAL

- ENGLISH, TELUGU, HINDI and SOCIAL are tested in the model of 10th Public.
- English paper will have CBSE model questions.



IIT-JEE TARGET ASSESSMENT

- The IIT-JEE target assessment is done based on the method of IIT-JEE, AIEEE and EAMCET.
- As mentioned earlier, Weekly Competitive and Fortnight RITE are the two programmes that test the student's competitive challenges / abilities / skills.
- The questions given are of the following pattern:
 - o Multiple answer Multiple choice questions
 - o Statement questions
 - o Assertion and Reason questions
 - o Matching (matrix matching, three column matching etc.)
 - o Linked Comprehension questions
 - o True or False Statement questions

WORKING ASSIGNMENTS

- Many working assignments are provided to the student as the lesson progressess in M.P.C. subjects.
- Student can work on the assignments to test the conceptual understanding and application.
- The assignments are set in a graded way Tier 1, Tier 2, Tier 3.
- Tier 3 assignments are highly challenging questions.

PRE & POST EXAMINATION FOR BETTER OUTCOME

LOGS

- Monthly logs of the portions (to be completed) are given to the students at the beginning of the month.
- Exam (unit test and terminals) portions are given seven days prior.

PRE - EXAMINATION SCHEDULE

- Before internal examinations, revision classes are conducted.
- For unit tests three days and for terminal examinations five days are allotted for revision.
- Resivion schedule will be given to the students to make their revision more profitable.
- Concerned subject teachers will be in continuous interaction with the students during the revision period.

POST – EXAMINATION WORK

- After the examination, the question papers are discussed in detail by the respective subject teachers.
- Remedial work will be given to the students so that the chances of committing the same mistake in upcoming examinations will be minimized.

COUNSELLING HOURS

- At the end of each RITE, counseling hour is provided.
- Even after every internal examination, counseling hour is attached.
- These counselling hours help to discuss the highs and lows of the student.
- Personal counselling is also taken to encourage them and instill positive attitude.

LIGHT HOUSES THE EMINENT STAFF

- Yes, the staff of our school are the torch bearers and light houses.
- Each one is a light house who shows the path towards success.
- Our staff are highly trained professionals.
- Regular teacher training programmes are conducted under the supervision of our director DR. K KRISHNA KISHORE. M.S. (ORTHO)
- Every month, the teachers are made to refer and review the International books in all subjects from our Library. This helps them to know what is happening around the world.
- The teachers are trained to teach in the model of IIT-JEE, EAMCET, AIEEE etc.,
- Comradery, appreciation and discipline are some of the principles that the staff are asked to follow strictly among themselves and with the pupils.

PARENT-TEACHER-PRINCIPAL MEETINGS

- Regular interactive sessions with the parents for better improvement of the child will be held periodically
- Parent Acad. Admin meets are conducted monthly once for the betterment of the child's academics, their demeanour and other activities.
- Obviously, this is our strong point.



WORKING HOURS

SCHOOL HOURS

Monday to Saturday - 8.30 am to 5.30 pm

STUDY HOURS

Monday to Saturday - 4.00 pm to 5.30 pm

TALENT TEST HOURS (4.00 pm to 5.30 pm)

Prior to talent tests, the study hours between 4.00 pm and 5.30 pm are used to train the students to face the competitive talent tests.



SCHOOL PROGRAMMES

L. C. D AUDIO - VISUAL CLASSES

- Audio visual classes are conducted in Maths, Physics, Chemistry and Biology.
- LCD projector is used for audio visual classes.
- The A.V. classes help the children to reinforce the concepts learnt in the class.
- Animated pictures and Real life pictures present a good viewing experience.
- L. C. D audio visual classes are conducted before and after completing each and every topic in maths, physics, chemistry, biology.

ANSWER SHEET PRESENTATION

- Special classes are taken to improve the presentation of answer sheet.
- Before unit tests and terminal examinations, rules of presenting answer sheet are explained in detail so as to improve their performance in examinations.

LIBRARY

- School library is a big bank of knowledge with variety of categories.
- During library periods, Students an opportunity to explore the library and drink deep at the fountain of knowledge.

GAMES AND EXTRA - CURICULAR ACTIVITIES

- Students will get a games period per week.
- Under extra curricular activity, weekly one ACTIVITY PERIOD (music, yoga etc.) is alloted. Each and every student shall choose one activity.



SCHOOL PROGRAMMES

COMPUTER EDUCATION

- One computer class per week will find place in the regular timetable.
- The computer education is also very helpful in attempting some talent tests, such as National Cyber Olympiad and Unified Cyber Olympiad

CO-CURRICULAR ACTIVITIES

- To re-boost up the child from studies, on every possible Saturday afternoon session, we have provided many co – curricular activities.
- Few of the activities included are:
 - o Group discussion o Seminars in subjects (OHP and Power Point)
 - Elocution o G. K. Quiz

 - Essay writing
 Educational field trips
 Subject Quiz
 Word Gambling
 Cultural events

EXTERNAL EXAMINATIONS

- To foster the skills of attending and attempting the external exams, we encourage and train the students to take up the following talent tests:
- These tests give the students the courage, confidence and conviction to attempt the external competitive exams.
 - OLYMPIAD talent tests
 - o NCO o UCO o NSO o IMO
 - o NSTSE
 - MAC MILLAN INTERNATIONAL TESTS
 - o and many other important talent tests



ENGLISH LANGUAGE DEVELOPMENT PROGRAMME

Now a days English language plays a prominent role as an international language around the world. Ever-growing needs for fluency and mastery in English around the world have given priority to finding more effective ways to teach English. It is therefore time to view what our current assumptions and practices are concerning the teaching of these crucial language skills.

CURRICULUM

We follow four modules.

Module I : English Literature (State board)

Module II : Writing skills (CBSE)

Reading skills (CBSE)

Module III : English Language and Grammar (School material)

Module IV : Communicative English

ENGLISH MATERIAL

Class X syllabus is taught

The English material is developed as follows.

LITERATUREMATERIAL

Literature material includes Meanings, Synonyms, Antonyms, Language usage, Prefix, Suffix, Text study answers.

GRAMMARMATERIAL

Grammar material has content which is useful for their Class X public exams.

WRITINGSKILLSMATERIAL

Message writing, Notice writing, Diary entry, Imaginative writing, Letter writing & Composition writing have been given in the writing skills materials.

COMMUNICATIVE LANGUAGE USE

(1) Asking for permission; (2) Would you mind ...; (3) Expressing gratitude and responding back; (4) apologizing; (5) saying how often; (6) expressing purpose; (7) asking for information; (8) talking about the past; (9) expressing condition; (10) encouraging / congratulating / sympathizing; asking, (11) giving, agreeing, disagreeing opinions; AND MANY MORE

PATTERN OF EXAMINATION

The exam is of Class X model.

English exam consists of 2 papers.

And also, in order to focus on the inherent talent & ability of the student, Questions on reading, writing skills, communication skills are set.



MENTAL ABILITY

Mental Ability helps to improve and enhance the analytical reasoning skills in the students. Analytical skills are important in IIT JEE and other competitive exams.

The advantages of MENTAL ABILITY

It develops GENERAL KNOWLEDGE It develops ANALYTICAL SKILLS

It develops APPLICATIVE SKILLS

It improves GENERAL AWARENESS

It improves ENGLISH LANGUAGE

It tests CRITICAL AND LOGICAL THINKING

It develops THINKING SKILLS

We are proud that we introduced MENTAL ABILITY in our curriculum.

We researched and found the impact of each and every mental ability question on the student's mind.

SYLLABUS OF MENTAL ABILITY

Verbal Reasoning

Blood relations; Direction sense test; Analogy; Mathematical operations;

Series; Logical diagrams; Classification; Decision making; Puzzle and Ranking test

Inserting the Missing character; Coding and Decoding; Alphabet test;

Mental Maths; Logical sequence of words; and many more.

Non - Verbal Reasoning

Series; Classification; Analogy; Continue the missing pattern and Visual IQ.

WORKING ASSIGNMENTS

Mental ability assignments are given to keep the student's mind in a challenging mode.

PATTERN OF ASSESSMENT

In the UNIT TESTS and TERMINALS, a paper on MENTAL ABILITY is set.



GENERAL SCHOOL RULES

School uniform:

- Pupils who are not in full uniform are liable to be sent home at the risk of the parent.
- Wearing uniform on the specified days should strictly be adhered to because the uniform has a discipline in itself.

Carrying books:

- He or she should bring the books according to the time table.
- Parental care is also solicited in regard to this.

Behavior in the campus:

- Running in the corridors is strictly prohibited.
- No shouting is allowed in or around the school building.

Spoken language in the campus:

• Communicating in English should be strictly followed during school hours inside the school campus.

Student attendance:

- Daily attendance is very important for your child to benefit the most from the school, and to learn the meaning of responsibility.
- Attendance is the responsibility of both the parents and the students.

Leaving the campus:

- For their own safety, students may not leave the campus during the school day without the permission.
- If it is necessary for your child to leave the campus, you must notify the principal in writing or in person.

Reporting absence:

- If your child is going to be absent, please notify the school in advance or by 9 o' clock on the day of the absence.
- If that is not possible, you must send a note with your child when he or she returns to the class which states the dates and reasons for their absence.

Visitors:

- We are always delighted to have you visit the school. It gives us a chance to get to know you better and to share information about school programmes and operations.
- Each time you visit, please stop by school office to sign in and let us know you are here.
- It is very important for us to know who is on campus to maintain students safety and security to prevent the school routine from being interrupted.

Fee payment:

• Fees payment should be done on time.

Visiting Hours:

• Parents should strictly follow the Visiting hours that are mentioned.



Ratnam Group of Doctor's Schools

Kids * Race * Olympiad * IIT * Concept * Global * NTSE * Techno

Nellore * Tirupati * Hyderabad

4 Lakh Students appear for IIT-JEE every year.

How are you different from the rest?

Ratnam i Techno makes you different and unique by providing strong fundamentals and ability to think laterally.



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