

## **GATEWAY TRAINING PROGRAMME**

**2-year Integrated Course** 

for

# IIT – JEE

## **AIEEE / BITSAT / AIPMT**

(2 and I year courses)

For admission to the most prestigious **Institutes of Technology in India** 

SCHOL ARSHIPS

Prof. K.K. Anand

( No.1 JEE Trainer in Southern India )

## **IIT-JEE**

## **Influencing factors for success in IIT- JEE**

#### Conceptual clarity:

The ability to think originally in correlating the known concepts and also applying them in problem solving of higher order difficulty level.

## Training:

Next key issue is the role played by training. This has profound influence in the end result. A student with good calibre may end up securing thousands of ranks lower (Or even may not secure a rank) than someone who is not as talented as him/her, if the quality of training is sub-standard. Results and means of achieving it should be given equal importance in quality training.

#### Hard-Work:

It is the hard-work of the student which is extremely important. Systematic focussed work for two years is of paramount importance and one must be prepared to put in hours of study every day.

When these factors combine, best results are assured.

#### Course Design and Schedule:

- Well designed course structure with more number of classroom hours well spaced and scheduled
- Maximum time utilization in the I year, so that the student finds it comfortable to prepare and perform well in both the boards and JEE in the II year

## Teaching Style and Methodology:

- Inimitable style of teaching along with lucid explanations
- In-depth analysis of concepts with revealing insights albeit simple to understand
- Thoroughness in the coverage of various aspects of a chapter

## **Assignments:**

- Assignment problems focussing more on conceptual knowledge and analytical skills
- Assignments unmatched in quality and quantity of problems
- Detailed discussion of Assignment problems in the classroom

## Course Materials, Tests and Guidance:

- Outstanding course-materials and prescription of right choice of quality books to save the valuable time of the student
- \* Specially designed unique series of subjective and objective tests which challenge even a genius student raising them to the rigorous standards of competitive examinations
- Large number of grilling quality tests with greater frequency
- Personal guidance for cracking IIT-JEE and Olympiads with confidence

## **IIT-JEE**

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Marks secured in Mathematics & Science in Std X Board Exam	Merit Scholarship Discount
Above 95%	Rs.10000/-
Above 90%	Rs.7000/-

Centres in Chennai - Adyar, Anna Nagar, Gopalapuram

# MAKE THE SMART MOVE TO SURE SUCCESS

"I attribute my success to Prof .K.K. ANAND'S meticulous and focussed training methodology. The study materials and tests were highlight of the training"



V. PRASHANTH IIT-JEE 2009, All India Rank 5

## **ADMISSION OPEN**

Contact

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## **AIEEE / AIPMT**

## 2- Year Integrated Training Programmes

### All India Engineering Entrance Exam

The All India Engineering Entrance Examination (AIEEE) is recommended to all the engineering aspirants. For entering any of the twenty nationally important NITs (which are next to the IITs) this test is mandatory. Further, several NIITs, a large number of national, union-territory and state institutions of higher learning and all institutions of a few states use only AIEEE as entrance test. Many of the Deemed Universities in Tamil Nadu and other states use AIEEE for filling 30% and more of their seats.

To remove certain misconceptions about All India Entrance Examinations and Admission, a few FAQs are presented with answers here.

Q. With about more than 350 Engineering colleges in Tamil Nadu (TN) why should a TNstudent try AIEEE?

A. Out of more than 400 Engineering Colleges in Tamil Nadu very few are of good quality, recognized for standards and consequently for campus recruitments and for further studies. Besides, many top ranking colleges become deemed universities, leaving less number of good institutions in the fray for the others who have not taken AIEEE.

On the other hand the number of Deemed Universities are increasing, many of which are using AIEEE for admitting students, either partly or fully. Apart from this, all the prestigious NITs use only AIEEE as admission test.

## Q. Can a State board student compete with a CBSE student in this exam?

A. The fact that there are only about 4500 CBSE students finishing +2 in the entire Tamil Nadu annually, and that about 30,000 candidates wrote AIEEE last year from Tamil Nadu should clarify how many State Board students took the exam! Further the number of State Board students getting into NITs is far in excess of students from CBSE! Significantly, a very large number of State Board students who have undergone training at AIMS Education made it to NITs and Deemed Universities when compared to CBSE students.

# Q. While I can get a management quota seat in a Tamil Nadu College, why should I take the trouble of writing AIEEE?

A. A management seat often comes for a price in the order of lakhs while a seat in an NIT costs less than twenty thousand rupees per semester. Also consider the difference in the academic merit the student would achieve. Even though it is conducted at All India level, state level ranks are awarded for admission to NITs.

## Q. What are PMPD (Pre-Medical and Pre-Dental) entrance examinations?

A. In the current shape these exams consist of a preliminary exam and a final exam, held respectively on the first Sunday of April and the second Sunday of May every year at All India level. Only those who qualify in the "Preliminary" will be allowed to take the "Final". Through this process 15% of seats in MBBS and BDS in all Govt. seats in all states except Andhra Pradesh and Jammu Kashmir are filled. The entrance exams are held by CBSE

## **HIGH SCORE WEEK-END CLASSES**

#### **OBJECTIVES:**

- To impart thorough knowledge of the course content
- To enhance analytical thinking and conceptual understanding of the topics.
- To enrich problem solving skills and interest in the subjects
- To strengthen originality and creativity in thinking

#### **COURSE HIGHLIGHTS**

- Week-end Classes
- Faculty with rich experience
- Topic wise tests followed by discussion
- Distribution of Solution scripts for better understanding

#### **FREE**

- Study materials worth Rs.3000/-
- Online career guidance
- AIEEE solved papers / AIPMT solved papers.
- Model question papers for high scores in the boards
- Information on Eng. and Medical Entrance Exams

#### **COURSE DURATION**

Phase - 1 From June 2009 to Jan 2010

Phase - II May 2010 to Jan 2011

Phase - III Continuously on all days after the Board Exam in March 2011

## MERIT SCHOLARSHIPS UPTO Rs.7500/-

AIMS offers Merit Scholarships for high achievers based on their marks in Maths and Science in Std. X Board Exam

COURSE FEE: (For 2 -year Integrated Training)

AIEEE or AIPMT(2009-10 & 2010-11) Rs.39,000 +4020 (Service tax) = Rs.43,020/-		
Marks secured in Std. X Boards	*Merit Scholarship (in Rs.)	Total fee with S.T.(in Rs.)
95% to 99%	7500	34,745/-
90% to 94%	5500	36,450/-
85% to 89%	3500	39,160/-

AIEEE & AIPMT(2009-10 & 2010-11) Rs.52,000 +5350 (Service tax) = Rs.57,350/-		
Marks secured in Std. X Boards	*Merit Scholarship (in Rs.)	Total fee with S.T.(in Rs.)
95% to 99%	10,000	46,325/-
90% to 94%	7,300	49,305/-
85% to 89%	4,700	52,170/-

## **All India Entrance Exams**

## a few sample questions with solutions for the beginners

#### **Mathematics**

Q1. Let a and b be real numbers such that  $a,b \ge 0$  and x be such that  $0 < x < \frac{\pi}{2}$ . Then the

Minimum value of the expression  $\left(1 + \frac{a}{\sin x}\right) \left(1 + \frac{b}{\cos x}\right)$  is?

**Solution**:  $\left(1 + \frac{a}{\sin x}\right)\left(1 + \frac{b}{\cos x}\right) = 1 + \frac{a}{\sin x} + \frac{b}{\cos x} + \frac{a}{\sin x} + \frac{b}{\cos x}$ 

Using AM – GM inequality we can say that  $\frac{a}{\sin x} + \frac{b}{\cos x} \ge \frac{2ab}{\sqrt{\sin x \cos x}}$ 

but  $\sin x \cos x = \frac{\sin 2x}{2} \le \frac{1}{2}$  so  $\frac{a}{\sin x} + \frac{b}{\cos x} \ge 2\sqrt{2}ab$  and  $\frac{a}{\sin x \cos x} \ge 2ab$ 

hence the minimum value of the required expression =  $1 + 2\sqrt{2}ab + 2ab = (1 + \sqrt{2}ab)^2$ 

#### Chemistry

Q1. At 298K and 1 atm, consider the decomposition of  $N_2O_4$  into  $NO_2$ , the partial pressure in an equilibrium mixture of  $N_2O_4$  and  $NO_2$  are .7 and .3 atm respectively. If x denotes the partial pressure of  $NO_2$  when equilibrium is re-established at 9 atm and same temperature. Then the quadratic equation in x is ?

**Solution:** At initial equilibrium the value of Kp is = (.3) 2/(.7) = 9/70. let at new equilibrium, the partial pressures of NO<sub>2</sub> and N<sub>2</sub>O<sub>4</sub> be x and y respectively, then we can write the following two equations

x + y = 9 and  $9/70 = x^2/y$ , from these two, eliminate y and get  $70x^2 + 9x - 81 = 0$  as the required quadratic equation.

## Physics

Q1. The work done by a force  $\vec{F} = (-6x^3i)$  N in displacing a particle from x = 4 m to x = -2 m is:

Solution:  $dW = \vec{F} \cdot d\vec{s} = -(6x^3)i \cdot (dxi + dyj + dzk) = -6x^3 dx$ , integrating this we get the work done by the force as  $W = \int_4^{-2} -6x^3 dx = 360J$  as the answer.

#### for admission contact:



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