

Narayana's Micro Schedule Tests + AITS ((MST-AITS)

Highlights of Course:

Narayana's Micro Schedule Test Set coupled with the much acclaimed Narayana's All India Test Series is definitively one of the best all round IIT-JEE/AIEEE/PMT Preparation cum Testing Program in the industry. MST + AITS is a thorough & intensive testing program created by our most experienced faculty for IIT-JEE/AIEEE/PMT preparation. An all through the year program consisting of challenging set of tests at **topic and sub topic** levels on the entire syllabus of IIT-JEE/AIEEE/PMT.

These specially designed tests have been developed to test the Grasp, Depth and Control of the student on each topic/sub topic level pin pointing the student's strength and weakness at micro levels. A clear assessment of one's weak areas allows for a timely remedial actions that could benefit the student highly in his/her board examinations as wells as the competitive examinations.

Hints and Solution of all the tests would be provided along with.

These tests would start right from beginning of the school session and would follow the flow of topics as per the CBSE pattern so that the student is able to test his command over the topic as they complete the topics in school. The end of this series of tests would coincide with the beginning of Narayana All India Test Series.

Narayana's All India Test Series offers students an opportunity to compete and test oneself at a national level gaining a measure of their preparation level among thousands of students with the all important All India Ranking. Narayana AITS consists of a total of **14 tests – 6 Part and 6 Full** Tests.

Detail analysis of NAITS will be provided after each and every test. Test analysis has divided in to Macro (Subject Wise) and Micro (Question-Wise) level analysis to give effective comparison to the student on a national platform.

Now Narayana's Power Packed Micro Scheduled Test Series Comes with Exhaustive Study Package.

- *Great Opportunity for Distance Learners*
- *Micro Schedule Test is design according to individual topic and sub-topic*
- *Know Your Strength Every Week through our Micro Schedule Test.*

NARAYANA IIT ACADEMY
(XI-STU BATCH) SCHEDULE REGULAR AND CORESPONDENCE STUDENTS

S.No.	Physics	Chemistry	Mathematics
1	Vector, units and dimensions, error analysis	Balancing of redox reaction, Oxidation number, Eudiometry, concept of equivalent weight, Molarity, Normality, Acid-base titration.	Wavy curve method, modulus and its application, slope of a straight line.
2	Average velocities, speed and acceleration, motion along a straight line.	Gas laws, Boyle's law, Charle' s Law, Graham's Law, Dalton's Law, Ideal gas equation, Ideal and Real gases, Kinetic theory of gases, Vanderwaal's equation of state.	Function, LCD (elementary only)
3	Graphical methods and calculus approach to kinematics.	Redox titration, back titration, double titration.	AP, GP & AGP
4	Projectile motion including motion on inclined plane.	Rutherford model of atom and its defects, Bohr's theory – Derivation of radius and energy – Demerits, Hydrogen spectrum, Photoelectric effect.	HP, Inequalities (Basic inequality), V_n method
16.08.2009	NMST-1 (1 TO 4 TESTS)		

5	Relative velocity and kinematics of circular motion.	Hiesenberg's uncertainty principle. de-Broglie's relations, quantum mechanical model of atom, quantum numbers, rules for filing electrons,	Properties and nature of roots of quadratic equations properties of roots of cubic and biquadratic equations. Condition of two roots/one root common of two quadratic equations
6	Newton's laws of motion & free body diagram and its simple application.	Periodic table, periodic properties, Size, IE, EA, EN	Quadratic expression, maximum and minimum value of quadratic function, location of roots, value of parameters
7	constraint relation, wedge and pulley problems. Pseudo force	Electronic theory of valency, Hybridisation, VSEPR theory, Bond angle	Trigonometric ratios and identities compound angle, multiple and sub multiple angles and transformations
8	Friction and dynamics of circular motion	Hybridisation, dipole moment, Fajan's Rule, MOT, Hydrogen bonding	Trigonometrical equations and inequalities of one or more than one variable
9	Work done by constant force and variable force, work energy theorem. measurement of PE and K.E.	Thermo chemistry	Inverse trigonometric functions (principal value only)
10	DESHAHRA HOLIDAY		
27.09.2009	NMST-2 (1 TO 9 TESTS)		

11	Conservation of mechanical energy, motion in a vertical circle.	Thermodynamics .	Properties and solution of triangle: Sine rule, Cosine rule, projection formula, half angles formulae, area of the triangle, Properties and solution of triangle.
12	Centre of mass, Conservation of linear momentum and impulse.	Basic idea of rate of reaction chemical equilibrium, relation between K_p and K_c .	Incentre, Centroid, Ortho center, Excentre, Circumcentre
13	Elastic and inelastic collision.	Degree of dissociation, Le-Chatelier's principle, Vant's Hoff equation, determination of degree of dissociation from MW i.e., Data.	Co-ordinates, area of the triangle, different form of straight line.
18.10.2009	NMST-3 (11 TO 13 TESTS)		
15	DIWALI HOLIDAY		
16	Moment of inertia of a rigid body.	Dissociation equilibria of monoprotic weak acid, mono acidic weak base, Ostwald dilution law, P_H , P_{OH} , K_W etc., Dissociation equilibria of diprotic weak acid.	Length of perpendicular, foot of perpendicular and image, Equations of Bisectors.
17	Concept of torque and angular momentum. conservation of angular momentum.	Salt hydrolysis, buffer solutions.	Family of straight line, Locus, pair of straight lines (only angle between lines & principle of homogenization).

08.11.2009	NPT-1 (1,2,3,4,5 & 16,17)		
19	Dynamics of rigid body & rolling motion	Theory of indicators, solubility product.	Circles: Equation of circles in different form, tangents, length of tangent, pair of tangents.
20	Newton's law of gravitation Gravitation field and potential	Homolytic and heterolytic bond fission and factors affecting them, inductive effect, electrometric effect.	Intersection of two circles, radical axis and radical center, Equations of normals, family of circles, locus
21	Kepler's law, & escape velocity	Resonance and hyper conjugative effect, Relative stabilities of resonating structures and reaction intermediates.	Complex numbers, properties of arguments, modulus and conjugate, Concept of rotation.
22	Fluid statics and dynamics	Acid base concepts, effect of substituents on the acidity of phenol and carboxylic acids and basicity of amines.	Geometrical application of complex numbers, nth roots of unity and its application
23	Properties of matter (elasticity, surface tension & viscosity)	Hydrogen and its compounds, S-block elements.	Parabola: Standard equation (different forms) equation tangent and normal, condition for tangent and normal.
27.12.2009	NPT-2 (11 TO 23 TESTS)		
25	Thermometry, Thermal expansion, Calorimetry,	Group – III, IV of periodic table.	Properties of the parabola (based on tangent and normal), problem based

			on locus
26	First law of Thermodynamics & kinetic theory of gases	Isomerism (except optical)	Ellipse: Standard equation (different forms) equation tangent and normal, condition for tangent and normal, Properties of ellipse (based on tangent and normals), problem based on locus
27	Heat transfer (conduction, convection and radiation). Newton's law of cooling.	Optical Isomerism Aromaticity	Hyperbola: Standard equation (different forms) equation tangent and normal, condition for tangent and normal and properties of Hyperbola, Rectangular hyperbola, problem based on locus.
28	Simple harmonic motion	Electrophilic Aromatic Substitution	Binomial theorem (general term, middle term, greatest term) (no multinomial theorem).
17.01.2010	NPT-3 (6 TO 10 & 26,27,28)		
29	Equation of Progressive wave and stationary waves	Alkanes	Problems based on binomial coefficient.
24.01.2010	NFT-1 (1 TO 28) (FULL TEST)		

30	Vibration of strings and its different mode	Alkenes (Preparation)	Permutation and Combination: Counting principles (sum rule, product rule, bijection principle, inclusion -exclusion principle), permutation and Combination.
31	Velocity of sound in different medium. Vibration of air columns	Reaction of Alkenes	Circular permutations, Generating function and its application
32	Beats and Doppler's effect in sound.	Hydrocarbons and Alkynes	Division and Distribution, number of divisors of a number and their sum, exponent of prime p in n!
14.02.2010	NFT-2 (1 TO 32) (FULL TEST)		