

# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

BATCH	TEST NUMBER & DOE, Timing	BIOLOGY SYLLABUS	CHEMISTRY SYLLABUS	MATH SYLLABUS	PHYSICS SYLLABUS
<b>CLASS 11<sup>th</sup>:EVENING BATCH 1:MOSHI BRANCH</b>	<b>MINOR TEST 01</b>  <b>11/08/2019</b> <b>3PM-6PM</b>	<p><b>DIVERSITY IN LIVING WORLD</b> : What is living? ; Biodiversity; Need for classification; Three domains of life; Taxonomy &amp; Systematics; Concept of species and taxonomical hierarchy; Binomial nomenclature; Tools for study of Taxonomy – Museums, Zoos, Herbaria, Botanical gardens.</p> <p><b>Plant Diversity</b> : Five kingdom classification; salient features and</p>	<p><b>STRUCTURE OF ATOM</b> : Atomic number, isotopes and isobars. Concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbital, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals- Aufbau principle, Pauli exclusion principles and Hund's rule, electronic configuration of atoms, stability of half filled and</p>	<p><b>SET, RELATION &amp; FUNCTION</b> (Introduction) Concept of Relation ,Domain ,Co-domain ,Range Concept of sign scheme Problem of Domain and Range Kind of function Composite Function with properties Inverse function with properties Some special function with their graph</p>	<p><b>KINEMATICS</b> (Motion along a straight line and Motion in a Plane) Motion and Rest with introduction of frame of reference, Variables of Translatory Motion (Position/ Displacement / Path length(Distance), Velocity/ Speed / Average Velocity / Average Speed, Acceleration / Average Acceleration), Relation among various variables of motion and their applications to variable</p>

**NOTE:TEST PAPER PATTERN:** For PCB Group(PHYSICS:45 MCQ,CHEMISTRY:45 MCQ,BIOLOGY:90 MCQ)  
 For PCM Group(PHYSICS:30 MCQ,CHEMISTRY:30 MCQ,MATH:30 MCQ)  
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## PIMPRI & MOSHI BRANCH

		<p>classification of Monera; Protista and Fungi into major groups; Lichens; Viruses and Viroids. Prokaryotic Cell (Bacteria) Salient features and classification of plants into major groups- Algae, Bryophytes, Pteridophytes, Gymnosperms and Angiosperms (three to five salient and distinguishing features and at least two examples of each category); Angiosperms classification up to class, characteristic features and examples).</p> <p><b>Cell Structure and Function :</b> Cell theory and cell as the basic unit of life;</p>	<p>completely filled orbitals.</p> <p><b>SOME BASIC CONCEPTS OF CHEMISTRY :</b> General Introduction: Important and scope of chemistry. Laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses. Mole concept and molar mass; percentage composition and empirical and molecular formula; chemical reactions, stoichiometry and calculations based on stoichiometry.</p>		<p>acceleration, Equations of Motion with constant acceleration (scalar and vector forms), Motion along a straight line, velocity time and position-time graphs for uniformly accelerated motion (graphical treatment), Motion under gravity, Free-fall, Motion in a plane with constant acceleration, Projectile Motion – Ground to Ground projection, Projection from a height (Horizontal projection), Relative Motion in one-dimensions, Relative Velocity in two</p>
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## PIMPRI & MOSHI BRANCH

Structure of prokaryotic and eukaryotic cell; Plant cell and animal cell; Cell envelope, cell membrane, cell wall; Cell organelles-structure and function; Endomembrane system endoplasmic reticulum, Golgi bodies, lysosomes, vacuoles; mitochondria, ribosomes, plastids, micro bodies; Cytoskeleton, cilia, flagella, centrioles (ultra structure and function); Nucleus nuclear membrane, chromatin, nucleolus.

dimensions (Rain-Man problem, River-Boat Problem & wind based questions)

### UNIT, DIMENSIONS AND MEASUREMENTS :

Classification of Physical Quantities according to their dependency i.e. Fundamental (or Base) and Derived quantities, Need for measurement (Units of measurement), Systems of units (FPS, CGS, MKS, SI system of units and Supplementary units, fundamental and derived units, Some idea about

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# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

					Practical and Improper units), Standards of Length, mass and time measurements, Dimensions of physical quantities, Dimensional Formulae of important physical quantities, Dimensional analysis and its applications & its limitations, SI prefixes and general guidelines for using Symbols of SI units, Errors in measurement (Systematic, Random and Least count Errors), Accuracy and precision of measuring instruments ; Absolute Error, Relative Error, Percentage Error
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## PIMPRI & MOSHI BRANCH

and Combination of Errors, Significant figures and its rules for Arithmetic operations (i.e. addition, subtraction, multiplication and division), Rounding off the uncertain digits.

### **BASIC MATHEMATICS USED IN PHYSICS**

**ALGEBRA :** Quadratic Equation (Roots of quadratic equation, Solution by Factorization and by Shridharacharya Formula, Properties of roots (real, equal, imaginary etc),

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## PIMPRI & MOSHI BRANCH

					Application of Quadratic equation in physics), Binomial Theorem and binomial approximation, Logarithm and Exponents (Laws of logarithms and exponents with applications / examples), Series (Arithmetic Progression and its general term and Sum, Sum of first n Natural numbers, Geometrical Progression and its general term and Sum, Sum of infinite GP), Componendo & Dividendo rule. <b>TRIGONOMETRY</b> : Angle & its measurement (Sexagesimal and Circular system), Trigonometric-
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## PIMPRI & MOSHI BRANCH

					ratios, Trigonometric identities, Four Quadrants & ASTC rule, T-ratios for general angles, Addition/subtraction Formulae, Small angle Approximation, Ranges of T-functions. CO- <b>ORDINATE GEOMETRY</b> : Define Origin, Axis or Axes, Co-ordinates of a point in a plane or space (2D or 3D), Distance Formula, Slope of a line and its interpretation, Graphs of commonly used functions (Straight line, Parabola, Circle, Ellipse, Hyperbola including rectangular
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## PIMPRI & MOSHI BRANCH

					hyperbola, Sinusoidal functions (sine and cosine functions), Exponential functions. <b>CALCULUS :</b> Differential calculus (Average rate of change and Instantaneous rate of change, Differentiation of commonly used functions, Rules of differentiation including Product and Quotient rules, Application of derivatives: Increasing and Decreasing nature, Maxima and Minima with geometrical / graphical explanation), Integral calculus (Integration is the reverse process of differentiation,
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## PIMPRI & MOSHI BRANCH

					<p>Indefinite and Definite Integration, Integration of commonly used functions, Rules of Integration, Application of Integral calculus: Area under a curve and Average value of a continuous function in an interval),</p> <p><b>Mechanical properties of Solid:</b> Elastic behavior, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear, modulus of rigidity, Poisson's ratio; elastic energy.</p>
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## PIMPRI & MOSHI BRANCH

<p><b>CLASS 11<sup>th</sup>:PIMPRI BRANCH</b></p>	<p><b>MINOR TEST 01</b></p> <p><b>11/08/2019</b> <b>3PM-6PM</b></p>	<p><b>DIVERSITY IN LIVING WORLD</b> : What is living? ; Biodiversity; Need for classification; Three domains of life; Taxonomy &amp; Systematics; Concept of species and taxonomical hierarchy; Binomial nomenclature; Tools for study of Taxonomy – Museums, Zoos, Herbaria, Botanical gardens. Plant Diversity : Five kingdom classification; salient features and classification of Monera; Protista and Fungi into major groups; Lichens; Viruses and Viroids. Prokaryotic Cell (Bacteria) Salient features and classification of plants</p>	<p><b>STRUCTURE OF ATOM</b> : Atomic number, isotopes and isobars. Concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbital, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals- Aufbau principle, Pauli exclusion principles and Hund's rule, electronic configuration of atoms, stability of half filled and completely filled orbitals.</p> <p><b>SOME BASIC CONCEPTS OF</b></p>	<p><b>SET, RELATION &amp; FUNCTION</b> (Introduction) Concept of Relation ,Domain ,Co-domain ,Range Concept of sign scheme Problem of Domain and Range Kind of function Composite Function with properties Inverse function with properties Some special function with their graph</p>	<p><b>UNIT, DIMENSIONS AND MEASUREMENTS</b> : Classification of Physical Quantities according to their dependency i.e. Fundamental (or Base) and Derived quantities, Need for measurement (Units of measurement), Systems of units (FPS, CGS, MKS, SI system of units and Supplementary units, fundamental and derived units, Some idea about Practical and Improper units), Standards of Length, mass and time measurements, Dimensions of physical</p>
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## PIMPRI & MOSHI BRANCH

into major groups- Algae, Bryophytes, Pteridophytes, Gymnosperms and Angiosperms (three to five salient and distinguishing features and at least two examples of each category); Angiosperms classification up to class, characteristic features and examples).

### Cell Structure and

**Function :** Cell theory and cell as the basic unit of life; Structure of prokaryotic and eukaryotic cell; Plant cell and animal cell; Cell envelope, cell membrane, cell wall; Cell organelles- structure and function;

**CHEMISTRY :** General Introduction: Important and scope of chemistry. Laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses. Mole concept and molar mass; percentage composition and empirical and molecular formula; chemical reactions, stoichiometry and calculations based on stoichiometry.

quantities, Dimensional Formulae of important physical quantities, Dimensional analysis and its applications & its limitations, SI prefixes and general guidelines for using Symbols of SI units, Errors in measurement (Systematic, Random and Least count Errors), Accuracy and precision of measuring instruments ; Absolute Error, Relative Error, Percentage Error and Combination of Errors, Significant figures and its rules for Arithmetic operations (i.e. addition, subtraction, multiplication

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## PIMPRI & MOSHI BRANCH

		<p>Endomembrane system endoplasmic reticulum, Golgi bodies, lysosomes, vacuoles; mitochondria, ribosomes, plastids, micro bodies; Cytoskeleton, cilia, flagella, centrioles (ultra structure and function); Nucleus nuclear membrane, chromatin, nucleolus.</p> <p><b>Biomolecule:</b> Chemical constituents of living cells: Biomolecules structure and function of proteins, carbohydrates, lipids, nucleic acids.</p>			<p>and division), Rounding off the uncertain digits. <b>KINEMATICS (Motion along a straight line and Motion in a Plane)</b> Motion and Rest with introduction of frame of reference, Variables of Translatory Motion (Position/ Displacement / Path length(Distance), Velocity/ Speed / Average Velocity / Average Speed, Acceleration / Average Acceleration), Relation among various variables of motion and their applications to variable acceleration, Equations of Motion with constant</p>
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# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

					acceleration (scalar and vector forms), Motion along a straight line, velocity time and position-time graphs for uniformly accelerated motion (graphical treatment), Motion under gravity, Free-fall, Motion in a plane with constant acceleration, Projectile Motion – Ground to Ground projection, Projection from a height (Horizontal projection), Relative Motion in one-dimensions, Relative Velocity in two dimensions (Rain-Man problem, River-Boat Problem & wind based questions)
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# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

<p><b>CLASS</b> 11<sup>th</sup>:MORNING BATCH:MOSHI BRANCH</p>	<p><b>MINOR TEST 01</b></p> <p>11/08/2019 3PM-6PM</p>	<p><b>ANIMAL KINGDOM :</b> Salient features and classification of animals- nonchordate up to phyla level and chordate up to classes level (three to five salient features and at least two examples). Structural Organization in Animals : Animal tissues; Morphology, anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of an insect (cockroach). (Brief account only)</p> <p><b>DIVERSITY IN LIVING WORLD :</b> What is living? ; Biodiversity; Need for</p>	<p><b>CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES :</b> Why do we need to classify elements, Genesis of periodic classification. Modern periodic law and long form of periodic table, Nomenclature of elements with atomic number &gt; 100, Electronic configuration of elements and types of elements. periodic trends in properties of elements- atomic radii, ionic radii, ionization enthalpy, electron gain enthalpy, electronegativity, valency.</p>	<p><b>SET, RELATION &amp; FUNCTION</b> (Introduction) Concept of Relation ,Domain ,Co-domain ,Range Concept of sign scheme Problem of Domain and Range Kind of function Composite Function with properties Inverse function with properties Some special function with their graph</p>	<p><b>UNIT, DIMENSIONS AND MEASUREMENTS :</b> Classification of Physical Quantities according to their dependency i.e. Fundamental (or Base) and Derived quantities, Need for measurement (Units of measurement), Systems of units (FPS, CGS, MKS, SI system of units and Supplementary units, fundamental and derived units, Some idea about Practical and Improper units), Standards of Length, mass and time measurements, Dimensions of physical</p>
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## PIMPRI & MOSHI BRANCH

classification; Three domains of life; Taxonomy & Systematics; Concept of species and taxonomical hierarchy; Binomial nomenclature; Tools for study of Taxonomy – Museums, Zoos, Herbaria, Botanical gardens.

**SOME BASIC CONCEPTS OF CHEMISTRY :** General Introduction: Important and scope of chemistry. Laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses. Mole concept and molar mass; percentage composition and empirical and molecular formula; chemical reactions, stoichiometry and calculations based on stoichiometry.

quantities, Dimensional Formulae of important physical quantities, Dimensional analysis and its applications & its limitations, SI prefixes and general guidelines for using Symbols of SI units, Errors in measurement (Systematic, Random and Least count Errors), Accuracy and precision of measuring instruments ; Absolute Error, Relative Error, Percentage Error and Combination of Errors, Significant figures and its rules for Arithmetic operations (i.e. addition, subtraction, multiplication

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## PIMPRI & MOSHI BRANCH

and division), Rounding off the uncertain digits.

**VECTORS** : Definition of scalar and vector quantities, Graphical representation of vectors, Notation of Vectors, Angle between two vectors, Types of Vectors (Unit vector, Null vector, Equal vectors and equality of vectors, opposite and Negative of a vector, Parallel and anti-parallel vectors, Co-planar vectors, axial vectors), Position and displacement vectors, Addition/ subtraction of two vectors (Triangle law,

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# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

					Parallelogram law), Addition of many vectors (Polygon law), Unit vectors and their significance (Representation of vector in terms of unit vector in plane and in space), Resolution of a Vector into components i.e. Cartesian Components in two and three dimensions and Direction Cosines, Multiplication or Division of a Vector by a Scalar (i.e. Real number), Scalar (Dot) product of two Vectors and component of a vector in the direction of another vector, Vector (Cross) product of two Vectors with its geometrical interpretation and Right hand rule for direction.
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## PIMPRI & MOSHI BRANCH

<p><b>CLASS</b> 11<sup>th</sup>:EVENING <b>BATCH 2:MOSHI</b> <b>BRANCH</b></p>	<p><b>MINOR</b> <b>TEST 01</b></p> <p>11/08/2019 3PM-6PM</p>	<p><b>DIVERSITY IN LIVING WORLD</b> : What is living? ; Biodiversity; Need for classification; Three domains of life; Taxonomy &amp; Systematics; Concept of species and taxonomical hierarchy; Binomial nomenclature; Tools for study of Taxonomy – Museums, Zoos, Herbaria, Botanical gardens.</p> <p><b>ANIMAL KINGDOM</b> : Salient features and classification of animals- nonchordate up to phyla level and chordate up to classes level (three to five salient features and at least</p>	<p><b>CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES</b> : Why do we need to classify elements, Genesis of periodic classification. Modern periodic law and long form of periodic table, Nomenclature of elements with atomic number &gt; 100, Electronic configuration of elements and types of elements. periodic trends in properties of elements- atomic radii, ionic radii, ionization enthalpy, electron gain enthalpy, electronegativity, valency.</p>	<p><b>SET, RELATION &amp; FUNCTION</b> (Introduction) Concept of Relation ,Domain ,Co-domain ,Range Concept of sign scheme Problem of Domain and Range Kind of function Composite Function with properties Inverse function with properties Some special function with their graph</p>	<p><b>VECTORS</b> : Definition of scalar and vector quantities, Graphical representation of vectors, Notation of Vectors, Angle between two vectors, Types of Vectors (Unit vector, Null vector, Equal vectors and equality of vectors, opposite and Negative of a vector, Parallel and anti-parallel vectors, Co-planar vectors, axial vectors), Position and displacement vectors, Addition/ subtraction of two vectors (Triangle law, Parallelogram law), Addition of many vectors (Polygon law), Unit</p>
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## PIMPRI & MOSHI BRANCH

two examples). Structural Organization in Animals : Animal tissues; Morphology, anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of an insect (cockroach). (Brief account only)

**SOME BASIC CONCEPTS OF CHEMISTRY :** General Introduction: Important and scope of chemistry. Laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses. Mole concept and molar mass; percentage composition and empirical and molecular formula; chemical reactions, stoichiometry and calculations based on stoichiometry.

vectors and their significance (Representation of vector in terms of unit vector in plane and in space), Resolution of a Vector into components i.e. Cartesian Components in two and three dimensions and Direction Cosines, Multiplication or Division of a Vector by a Scalar (i.e. Real number), Scalar (Dot) product of two Vectors and component of a vector in the direction of another vector, Vector (Cross) product of two Vectors with its geometrical interpretation

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## PIMPRI & MOSHI BRANCH

and Right hand rule for direction.

### UNIT, DIMENSIONS AND MEASUREMENTS :

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## PIMPRI & MOSHI BRANCH

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## PIMPRI & MOSHI BRANCH

and its rules for Arithmetic operations (i.e. addition, subtraction, multiplication and division), Rounding off the uncertain digits.

**KINEMATICS (Motion along a straight line and Motion in a Plane)**  
Motion and Rest with introduction of frame of reference, Variables of Translatory Motion (Position/ Displacement / Path length(Distance), Velocity/ Speed / Average Velocity / Average Speed, Acceleration / Average Acceleration), Relation

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## PIMPRI & MOSHI BRANCH

					among various variables of motion and their applications to variable acceleration, Equations of Motion with constant acceleration (scalar and vector forms), Motion along a straight line, velocity time and position-time graphs for uniformly accelerated motion (graphical treatment), Motion under gravity, Free-fall, Motion in a plane with constant acceleration,
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**NOTE: TEST PAPER PATTERN:** For PCB Group(PHYSICS:45 MCQ,CHEMISTRY:45 MCQ,BIOLOGY:90 MCQ)

For PCM Group(PHYSICS:30 MCQ,CHEMISTRY:30 MCQ,MATH:30 MCQ)

For PCMB Group(PHYSICS:20 MCQ,CHEMISTRY:20 MCQ,BIOLOGY:40 MCQ, MATH:20 MCQ)

# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

<p>12<sup>th</sup>+ Repeater:MOSHI BRANCH</p>	<p>MINOR TEST 02  11/08/2019 3PM-6PM</p>	<p><b>Biology and Human Welfare (Domestication of Plants) :</b> Improvement in food production, Plant breeding, tissue culture, single cell protein, Biofortification. <b>Biology and Human Welfare : Health and Disease;</b> Pathogens; parasites causing human diseases (Malaria, Filariasis, Ascariasis. Typhoid, Pneumonia, common cold, amoebiasis, ring worm); Basic concepts of immunology-vaccines; Cancer, HIV and AIDS; Adolescence, drug and alcohol abuse.</p>	<p><b>ORGANIC CHEMISTRY–SOME BASIC PRINCIPLES AND TECHNIQUES :</b> General introduction, Tetra valence of carbon: Shapes of organic compounds, structural representation of organic compounds, methods of purification qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds. Electronic displacements in a covalent bond: inductive effect, electromeric effect, resonance and hyper conjugation. Homolytic and heterolytic fission of a</p>		<p>Current electricity and Heating Effects of Current : Electric current, flow of electric charges in a metallic conductor, drift velocity and mobility, relaxation time and their relation with electric current and current density, Ohm's law, electrical resistance, V-I characteristics (linear and non-linear),Electrical resistivity and conductivity, Carbon resistors, colour code for carbon resistors, Series and parallel combinations of resistors, Temperature dependence of resistance,</p>
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 For PCM Group(PHYSICS:30 MCQ,CHEMISTRY:30 MCQ,MATH:30 MCQ)  
 For PCMB Group(PHYSICS:20 MCQ,CHEMISTRY:20 MCQ,BIOLOGY:40 MCQ, MATH:20 MCQ)



# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

	<p><b>Apiculture and Animal husbandry (Domestication of Animals).</b></p> <p><b>Body Fluids and Circulation :</b> Composition of blood, blood groups, coagulation of blood; Composition of lymph and its function; Human circulatory system-Structure of human heart and blood vessels; Cardiac cycle, cardiac output, ECG, Double circulation; Regulation of cardiac activity; Disorders of circulatory system- Hypertension, Coronary artery disease, Angina</p>	<p>covalent bond: free radicals, carbocations, carbanions; electrophiles and nucleophiles, types of organic reactions (Reaction Mechanism).</p> <p><b>STRUCTURE OF ATOM</b> : Atomic number, isotopes and isobars. Concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbital, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals- Aufbau principle, Pauli exclusion principles and</p>	<p>Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's laws (KCL and KVL) and simple applications, Wheatstone bridge, Meter Bridge, Potentiometer-principle and applications to, Measure potential difference, For comparing emf of two cells, Measurement of internal resistance of a cell, Moving coil galvanometer and its, Current sensitivity and voltage sensitivity, Conversion to ammeter</p>
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For PCM Group(PHYSICS:30 MCQ,CHEMISTRY:30 MCQ,MATH:30 MCQ)

For PCMB Group(PHYSICS:20 MCQ,CHEMISTRY:20 MCQ,BIOLOGY:40 MCQ, MATH:20 MCQ)

# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

		<p>pectoris, Heart failure.</p> <p><b>Neural Control and Coordination :</b> Neuron and nerves; Nervous system in humans- central nervous system, peripheral nervous system and visceral nervous system; Generation and conduction of nerve impulse; Reflex action; Sense organs; Elementary structure and function of eye and ear.</p>	<p>Hund's rule, electronic configuration of atoms, stability of half filled and completely filled orbitals.</p> <p><b>CHEMICAL KINETICS :</b> Rate of a reaction (average and instantaneous), factors affecting rates of reaction; concentration, temperature, catalyst; order and molecularity of a reaction; rate law and specific rate constant, integrated rate equations and half life (only for zero and first order reactions); concept of collision theory (elementary idea, no mathematical treatment). Activation energy, Arrhenius equation.</p>		<p>and voltmeter, Electrical energy and power. Applications to Electric Bulbs and Heaters.</p> <p><b>MECHANICAL PROPERTIES OF SOLID:</b> Elastic behavior, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear, modulus of rigidity, Poisson's ratio; elastic energy.</p>
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For PCMB Group(PHYSICS:20 MCQ,CHEMISTRY:20 MCQ,BIOLOGY:40 MCQ, MATH:20 MCQ)

# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

<p><b>REPEATER BATCH:PIMPRI</b></p>	<p>MINOR TEST 01</p> <p>01/09/2019 10:30AM- 1:30PM</p>	<p><b>REPRODUCTION :</b> Reproduction in organisms: Reproduction, a characteristic feature of all organisms for continuation of species; Modes of reproduction – Asexual and sexual; Asexual reproduction; Modes-Binary fission, sporulation, budding, gemmule, fragmentation; vegetative propagation in plants. Sexual reproduction in flowering plants : Flower structure; Development of male and female gametophytes; Pollinationtypes, agencies</p>	<p><b>ORGANIC CHEMISTRY–SOME BASIC PRINCIPLES AND TECHNIQUES :</b> General introduction, Tetra valence of carbon: Shapes of organic compounds, structural representation of organic compounds, methods of purification qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds. Electronic displacements in a covalent bond: inductive effect, electromeric effect, resonance and hyper</p>		<p><b>Ray optics and optical Instruments :</b> Reflection of light (Laws of Reflection, Reflection at Plane Surface (Plane Mirror): Formation of Image, Deviation, Rotation of mirror, Number of images, velocity of image, Minimum length of mirror to see full image of a man, Field of view, Reflection at Spherical Surface (Curved Mirror: Rules of image tracing, Image formation in concave and convex mirrors, Focal length of spherical mirrors,</p>
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For PCMB Group(PHYSICS:20 MCQ,CHEMISTRY:20 MCQ,BIOLOGY:40 MCQ, MATH:20 MCQ)

# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

		<p>and examples; Outbreeding devices; Pollen-Pistil interaction; Double fertilization; Post fertilization events- Development of endosperm and embryo, Development of seed and formation of fruit; Special modes-apomixis, parthenocarpy, polyembryony; Significance of seed and fruit formation.</p> <p><b>Human Reproduction :</b> Male and female reproductive systems; Microscopic anatomy of testis and ovary; Gametogenesis spermatogenesis &amp; oogenesis; Menstrual</p>	<p>conjugation. Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions; electrophiles and nucleophiles, types of organic reactions (Reaction Mechanism).</p> <p><b>CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES :</b> Why do we need to classify elements, Genesis of periodic classification. Modern periodic law and long form of periodic table, Nomenclature of elements with atomic number <math>&gt; 100</math>,</p>		<p>Relation between <math>u</math>, <math>v</math> and <math>f</math> (i.e. Mirror Equation for Para-axial rays), Sign convention, Magnification), Refraction of light at Plane Surface (Snell's law, Total internal reflection and its applications (Mirage, Looming, Diamond, prism and optical fibers), Optical Path, Lateral and normal shift], Refraction at spherical surfaces (single and double surface), Lenses (Thin lens formula, Lens-maker's formula, Magnification, Power of a lens, Combination of thin lenses in contact,</p>
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For PCMB Group (PHYSICS:20 MCQ, CHEMISTRY:20 MCQ, BIOLOGY:40 MCQ, MATH:20 MCQ)

# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

		<p>cycle; Fertilisation, embryo development upto blastocyst formation, implantation; Pregnancy and placenta formation (Elementary idea); Parturition (Elementary idea); Lactation (Elementary idea). Reproductive Health : Need for reproductive health and prevention of sexually transmitted diseases (STD); Birth control- Need and Methods, Contraception and Medical Termination of Pregnancy (MTP); Amniocentesis; Infertility and assisted reproductive technologies – IVF, ZIFT, GIFT (Elementary idea for general awareness).</p>	<p>Electronic configuration of elements and types of elements. periodic trends in properties of elements- atomic radii, ionic radii, ionization enthalpy, electron gain enthalpy, electronegativity, valency.</p> <p><b>CHEMICAL BONDING AND MOLECULAR STRUCTURE :</b> Kossel Lewis Approach to Chemical Bonding, Valence electrons, ionic bond, covalent bond, bond parameters, Lewis structure, polar character of covalent</p>		<p>Combination of a lens and a mirror, Silvering of Lenses, Chromatic and Spherical Aberrations.), Refraction and dispersion of light through a prism, combinations of prisms, Some Natural Phenomena due to Sunlight (Rainbow- dispersion of sun light and TIR, Scattering of light- blue colour of the sky and reddish appearance of the sun at sunrise and sunset), Optical instruments (Human eye, image formation and accommodation, correction of eye defects (myopia, hypermetropia</p>
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For PCMB Group (PHYSICS:20 MCQ, CHEMISTRY:20 MCQ, BIOLOGY:40 MCQ, MATH:20 MCQ)

# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

bond, valence bond theory, resonance, geometry of molecules, VSEPR theory, concept of hybridization involving s, p and d orbitals and shapes of some simple molecules, molecular orbital theory of homonuclear diatomic molecules (qualitative idea only). Hydrogen bond. Dipole Moment.

**SOME BASIC CONCEPTS OF CHEMISTRY :** General Introduction: Important and scope of chemistry. Laws of chemical combination, Dalton's atomic theory:

and astigmatism) using lenses, Microscopes and telescopes (reflecting and refracting) and their magnifying powers)

### **KINEMATICS (Motion along a straight line and Motion in a Plane)**

Motion and Rest with introduction of frame of reference, Variables of Translatory Motion (Position/ Displacement / Path length(Distance), Velocity/ Speed / Average Velocity / Average Speed, Acceleration / Average Acceleration), Relation among various variables of

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For PCMB Group(PHYSICS:20 MCQ,CHEMISTRY:20 MCQ,BIOLOGY:40 MCQ, MATH:20 MCQ)

# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

concept of elements, atoms and molecules. Atomic and molecular masses. Mole concept and molar mass; percentage composition and empirical and molecular formula; chemical reactions, stoichiometry and calculations based on stoichiometry.

motion and their applications to variable acceleration, Equations of Motion with constant acceleration (scalar and vector forms), Motion along a straight line, velocity time and position-time graphs for uniformly accelerated motion (graphical treatment), Motion under gravity, Free-fall, Motion in a plane with constant acceleration, Projectile Motion – Ground to Ground projection, Projection from a height (Horizontal projection), Relative Motion in one-

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# TEST SERIES SCHEDULE: NEET UG/JEE-MAINS

## PIMPRI & MOSHI BRANCH

					dimensions, Relative Velocity in two dimensions (Rain-Man problem, River-Boat Problem & wind based questions)
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