

AJEE 2023 Syllabus

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| Physics | Acceleration due to Gravity, Dimensional Analysis, Electromagnetism, Electronics, Electrostatics, Escape Velocity, Gas Laws, Geostationary Satellites, Heat Conduction, Hooke's Law, Kinetic Energy, Kinetic Theory of Gases, Optics, Oscillations, Shear and Bulk Modulus, Specific Heats, Surface Energy, Units and Dimensions, Universal Law of Gravitation, Young's Modulus |
| Chemistry | Biomolecules, Calculation of Empirical and Molecular Formula, Chemical Analysis, Chemical Kinetics, Chemical Bond, Equilibrium, Chemical Periodicity, Study of Elements, Coordination Compounds, Electrochemistry, Ionic Equilibria in Solutions, Nomenclature of Organic Compounds, Nuclear Chemistry, Organic Compounds, Polymers, Preparation of Properties, Principles of Metallurgical Operations, Solid State, Solutions, Structure of Atom, Surface Chemistry, Thermochemistry and Thermodynamic Transition |
| Botany | Difference between Prokaryotes and Eukaryotes, Ecosystem, Elementary knowledge of Microsporogenesis, Enzymes and Growth Hormones with Reference to their Classification, Improvement of Crops, Kingdom Classification, Binomial Nomenclature, Mendel's Laws of Inheritance, Principles of Plant Breeding, Role of Plants in Human Welfare, Structural Organization of Cell, Cell Theory, Tissues and Tissue Systems |
| Zoology | Endocrine Glands of Man and Hormonal Coordination, Histology of Mammalian Organs, Skeleton, Joints, Muscles on the Basic Movement Receptors, Structure and Function of Animal Tissues, Epithelial Structure and Physiology of Different Organs of the Human Body, Vitamins and Minerals |

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| Agriculture (Arts and Science Group) | Importance and Scope of Agriculture in our National Economy, Meteorology, Soils, Tillage, Manures and Fertilizers, Weeds and Weed Control, Irrigation and Drainage, Cropping Schemes, Introduction to Horticulture, Cultivation of Fruit Plants, Cultivation of Vegetables, Animal Husbandry, Milk and Milk Testing, Milk products and Dairy Machines, Diseases of Cattles, Poultry Farming |
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| <p>Crop Production and Horticulture</p> | <p>Soil and Fertility, Tillage, Manures and Fertilizers, Production of Crops, Elementary Surveying, Importance and Scope of Horticulture, Vegetable Gardening, Fruit Cultivation, Ornamental Gardening, Fruit and Vegetable Preservation, Preservation of Fruits and Vegetables, Rural Finance</p> |
| <p>Elements of Animal Husbandry and Poultry Farming</p> | <p>Importance of Livestock in Indian Economy, Improved Cattle Breeds, Care and Management of Cattle, Breeding of Cattle, Dairy Farming, Milk Production, Consumption of Milk, Physical Properties of Milk, Feed and Feeding, Judging of Cattle, Dairy appliances, Milk Products, Common Diseases of Cattle, Poultry Farming, Housing and Ration for Poultry Birds, Diseases of Poultry</p> |