



Syllabus for EVS

ENVIRONMENTAL SCIENCE (EVS) Grades I-V

Natural and Man-made Resources

Food - Sources of food, Parts of a plant that can be eaten, Edible and non-edible food, Food habits of different kinds of people, Cooking: ingredients needed to cook, Food and Nutrition, Balanced Diet, Cultural Diversity in food, Plants as natural medicines/remedies, History of Utensils used for cooking, Different forms of food: raw food, cooked food, Steps and Efforts involved in cooking, Different cooking methods (roasting, boiling, frying, baking), Fuels used for cooking (kerosene, oil, gas, wood, coal, electricity), Spices: History of spices, different types of spices, different tastes, Different kinds of fruits and vegetables: shape, colour, texture, taste, nutritional value, price etc., Food and Wastage, Perishable and Non-perishable items, Spoilt food, Expiry date for food items, Consuming spoiled food, Methods to preserve food

Fabric - Fibres, Types of fibres, Sources of different fibres, Process from Thread to Cloth, different techniques of converting thread to cloth, Clothes for different climates and seasons, Weaving and steps of weaving process, machine for making fabrics: loom, Silk rearing and production, Different textures, colours and design of clothes, Clothes in different cultures

Water - Sources of Water, Formation of clouds, Uses and Importance of Water, Amount of water used for different activities, Water Scarcity, Wastage and Conservation, Rain Water Harvesting and other techniques to conserve water, Water Cycle, Water Storage, Water Pollution: Causes, Effect, Prevention and Resolution, Water levels in different seasons, Methods to clean water, Drinking Water, Potable Water, Different methods of obtaining water, Water from rivers to sea, Water as a solvent, Properties of Water: Physical properties, Water as a liquid, Evaporation and Condensation, Different Water Purification techniques: Sedimentation, Filtration, Distillation

Places and People

Landscape - Habitats, Types of Habitats and their features, Soil and different soil types, Difference in landscape based on country, natural vegetation and culture, Diversity in landscapes, Different landscapes encountered in day-to-day life, Maps and the Globe: Identifying countries and states from a map, Identifying different things near a state from a

map - sea, forest, neighbouring states, etc, Advantages and Disadvantages of different landscapes

Diversity - Diversity in different states, Travelling from one state to another: Different landscapes, views, people observed, Outdoors: staying outdoors, outdoor activities, preparation to stay outdoors, difference in climatic conditions, culture, language, and habits in different states, Cultural importance of different places and diversity of people living there

Location and People - Different kinds of houses based on the location, Features of places in different altitudes; Adaptations of people, animals and plants to different habitats; Lifestyle of people in different habitats, Landmarks to locate different places

Models and Representations - Symbols to represent places: school, hospital etc, Different symbols, signs and representations used on the road, to handle traffic, Different directions, Navigating directions, instruments used to navigate: compass, Global Positioning System (GPS), Map reading, Locating places using a map, Globe and its applications, Locating places using a globe

Flora and Fauna

Animals - Definition and Characteristics, Animal Kingdom: mammals, birds, fish, reptiles, amphibians, insects, Similarities and Differences between animals and human beings, Classification of Animals based on different categories (Habitat, Food habits, Reproduction), Domestication of animals, Movement in animals, Adaptation of animals to their habitats, Unique features and characteristics of different species of animals, Variations in body parts of different animals (types of teeth, feet, nose, etc), Relationships between different species and categories of animals, Predators and Prey, Bee-keeping: Process, Characteristics and Uses, Other insects similar to bees, Snakes: Different kinds of snakes, Remedy for snakebites, Animals in Zoos, Animal behaviour in different seasons (Reproduction, Hibernation), Sleeping patterns in animals, Nocturnal and Diurnal animals, Senses in animals: Signals used, how they protect themselves, Endangered and Extinct species of animals: Causes and Effects, Ill-treatment and commercial use of animals

Plants and Trees - Diversity in Plants, Plant Kingdom: different species, examples of different plants, Similarities and Differences between between plants and animals, Classification of Plants based on different categories (physical characteristics like size, shape, Flowering and Non-flowering plants, Lifecycle and Lifespan), Different parts of a plant, their functions and uses, Edible parts of a plant, Different processes in plants (Photosynthesis, Transpiration, Respiration), Types of trees found in different habitats: characteristics and properties, Adaptation of plants and trees to their habitats, Flowers: Growth and Contribution to reproduction, Uses of flowers, Edible flowers, Pollen, Pollen carriers, Germination: Lifecycle of a seed, Properties of seeds, Different types of seeds, Conditions required for seeds to germinate, Different ways in which seeds are transmitted, Origin of different plants, Deforestation, Preserving the environment, Endangered and Extinct species of plants: Causes and Effects, Ill-treatment and commercial overuse of plants

Forests - Definition of a forest, Characteristics of forests, Different Types of forests, Uses and Benefits of forests, Types of trees, Forest Settlements, Deforestation: Causes and Effects, Forests in India, Laws protecting forests

Birds - Different kinds of birds: Based on physical characteristics, Classification of Birds: Based on habitat, size, body temperature, food habits, Unique characteristics of different birds, Parts of a bird, Habitats of birds: Nests, Different types of nests, Adaptation of birds to their habitats, Reproduction in birds, Variations in body parts of different birds: different types of feet, beaks, claws, feathers and their uses, Predators and Preys, Endangered and Extinct species of birds: Causes and Effects, Ill-treatment and commercial use of birds

Food Web - Ecology, Ecosystems, Plant Kingdom, Animal Kingdom, Food Chain, Interactions among different living things, Predators and Preys

Human Body

Genetics - Genetics, Genes and Inherited characteristics, Types of inheritance, Resemblances within a family, Similar traits and habits within a family, Acquired traits, Relationships within a family, Family dynamics, Characteristics of twins, Hereditary and Non-hereditary diseases

Senses - Sense organs: In Plants, Animals and Human Beings, Special senses in animals, Characteristics of different smells, Distinctive odours, Difference in physical characteristics and other features of sense organs in different living things

Body Systems - Adaptation of body systems to habitats, Different body systems in plants, animals and human beings, Similarities and Differences in the body systems of plants, animals and human beings, interdependence between different body systems, Food habits, Nutrition and Exercises to maintain proper functioning of body systems, Digestive System: Different organs of the digestive system, Characteristics of organs, Process of Digestion: From mouth to stomach, Causes and Effects of improper digestion, Digestive disorders and diseases, Circulatory System: Different organs of the circulatory system, Characteristics of organs, Process of Circulation, Causes and Effects of improper circulation, Circulatory disorders and diseases, Respiratory System: Different organs of the respiratory system, Characteristics of organs, Process of Respiration, Causes and Effects of improper respiration, Musical instruments which uses the Respiratory system, Respiratory disorders and diseases

Human-Environment Interactions

Diseases - Different types of diseases: Communicable and Non-Communicable, Causes and Symptoms of different diseases, Spread of diseases, Diagnosis of a disease, Prevention of diseases, Treatment of different diseases, Deficiency Diseases, Poor Nutrition, Balanced Diet

Natural Disasters - Different kinds of Natural Disasters: Floods, Earthquakes, Landslides, Drought, Cyclones, Tsunamis, Causes and Effects of a particular natural disaster, Disaster Management, Preparation for Natural Disasters, Disaster Prone areas

Transport and Communication

Interactions - Different types of verbal and non-verbal communication, Communication using sign language, facial expressions and 'mudras', Interaction with people from different walks of life

Modes of Communication - History and Origin of Communication, Symbols used for communication, Cave paintings to the Internet, Postal Services: History, Uses, Address,

different types of stamps, Sequence from posting to receiving the letter, Radio, Telephones, Different types of telephones, Other modes of communication, Telecommunication

Modes of Transport - History and Timeline of transport, Different modes of transport used to travel to different places, Different types of vehicles, Purpose of different vehicles, Characteristics of different vehicles, Ambulance and its significance, Different types of fuels used to run different types of vehicles, Sources of these fuels, Cost of different fuels, Cost and Mileage of different vehicles, Pollution caused by vehicles: Air and Noise Pollution, Different kinds of roads, Traffic, Road and Traffic rules, Renewable and Non-renewable resources, Conservation of resources, Steps to conserve resources, Public Transport, Increase/Decrease in dependency on Non-renewable resources

Solar System

Earth and Space - Earth and its features, Gravity, Astronauts: Story of Sunita Williams, their experience, View of earth from space, Globe - locating countries, Map - boundaries on map and globe, Moon and stars, Rotation and Revolution, Different Phenomena caused due to rotation and revolution, Phases of the moon

Society, Community and Culture

Entertainment - Different entertainment activities popular in various countries, Hobbies, Different types of games - both specific to a country and universal, Competitive and Non-competitive games, Rules of different games in different regions, Games played in different communities, Different sports played specifically in India and around the world, Famous sportspersons/athletes, Conflict in games and sports: Disputes and how they can be resolved, Role of different people in a game: Participants, Opponents, Coach, Trainer, Discipline required of athletes, Different communities of athletes, Awards and Recognition won by different athletes

Family - Origin of a family: History, reasons to live in a group, Members of a family, Family Structures, Family Tree, Family Dynamics, Occupations within the family, Role of family in development of children, Customs followed in different families, Difference in lifestyle, activities, habits of different families, Changes in Family structure, dynamics and routine,

Arrival of new members, Other reasons for changes in family, Tracing back family roots, Family as support system, Disputes within families, Difference in families and family structure across generations and the world, Laws that protect different members of a family: Child Protection, Child Marriage, Domestic Violence

Shelter and Living Space - Different types of Shelters, Different types of houses: Based on the region, material used in construction, landscape, climate, Construction of houses, Parts of a house, Decoration of houses during celebrations, Houses in urban vs rural areas, Advantages and Disadvantages of houses in cities, Money: History of money, different currencies and its uses, Different landmarks and essential services near our house: hospital, bus stop, school, post office etc., Neighbourhood, Migration from one place to another: Cause and Effect

Occupation - Different types of occupations/professions, Different kinds of occupation within a family, Household work, Paid vs Unpaid Occupations, Skilled vs Unskilled labour, Titles of people in different occupations, Occupations in the Armed Forces: Army, Navy, Airforce, Farming and Agriculture, Steps of cultivation, Harvesting crops to selling yield, Evolution of agriculture: Ancient vs Modern tools and techniques used, Modernisation of Farming, Different types of Farming: based on the crops grown, region practiced in, Different types of crops, Conditions necessary for different crops, Lifestyle of Farmers, Problems faced by farmers, Migration from rural to urban areas in search of jobs, Profession associated with certain communities, Occupations associated with culture and tradition of communities: pottery, weaving etc., History and Description of these professions, Endangered crafts and professions

Changes in Lifestyle - Changes in territory: Partition of India, Cause and Effect of changes, Migration of people, Reasons for migration, Different kinds of houses after migration, Lifestyle in villages vs cities, Cost of building houses in different places based on lifestyle, Destruction of environment to aid changing lifestyle, Building different structures for the community: Dams, Advantages and Disadvantages, Slums in cities, Dislocation and Relocation of people and communities: Reasons, Problems and Resolution