



BHARATHIDASAN UNIVERSITY

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Programme: M.A., HUMAN RESOURCE MANAGEMENT

Course Title : Natural Resource Management

Course Code : 22HRM4EC8

Unit-V

Experiential Learning

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Experiential Learning

Agenda

- Sewage Treatment Plant
- Vermi-composting Unit
- Home Gardening and Vegetation
- Air Monitoring Laboratory
- Rain Water Harvesting
- More Topics

Sewage Treatment Plant

- Process Overview:
- Primary, secondary, and tertiary treatment
- Benefits:
- Water recycling, pollution reduction

Vermi-composting Unit

- Definition:
- Using worms to convert organic waste into compost
- Advantages:
- Reduces waste, enriches soil fertility

Home Gardening and Vegetation

- Practices:
- Kitchen gardens, rooftop gardens
- Benefits:
- Food security, mental health, biodiversity

Horticulture and Floriculture

- Horticulture:
- Cultivation of fruits, vegetables, and plants
- Floriculture:
- Cultivation of flowering plants
- Economic and aesthetic value

Mushroom Cultivation

- Process:
- Cultivation on substrates like straw
- Benefits:
- High nutritional value, income generation

Air Monitoring Laboratory

- Role:
- Monitor air quality, pollutant analysis
- Tools:
- Air samplers, gas analyzers
- Impact:
- Informs pollution control policies

Rain Water Harvesting System

- Definition:
- Collecting and storing rainwater for reuse
- Benefits:
- Water conservation, groundwater recharge

Biogas Plant

- Process:
- Anaerobic digestion of organic material
- Products:
- Methane gas, organic slurry
- Applications:
- Cooking, electricity generation

Green Building

- Definition:
- Environmentally responsible building practices
- Features:
- Energy efficiency, water conservation
- Examples:
- LEED-certified buildings

Solid Waste Management Plant

- Processes:
- Segregation, recycling, landfill management
- Goals:
- Reduce waste, promote recycling

Hydro/Thermal Power Plants

- Hydro Power:
- Uses water flow for electricity
- Thermal Power:
- Uses heat energy, coal/gas as fuel
- Environmental Impacts

Environmental Agencies

- Roles:
- Monitor, regulate, and promote environmental protection
- Examples:
- UNEP, CPCB, EPA

National Parks and Sanctuaries

- Purpose:
- Conserve wildlife and habitats
- Examples:
- Jim Corbett National Park, Kaziranga

Biosphere Reserves

- Definition:
- Protected areas for biodiversity
- Functions:
- Conservation, research, and development

Organic Farming

- Definition:
- Avoids synthetic chemicals
- Benefits:
- Sustainable, eco-friendly
- Challenges:
- Cost, pest management

Government Programmes

- Key Initiatives:
- Swachh Bharat Abhiyan, National Solar Mission
- Provisions:
- Subsidies, research grants

Environmental Issues and Challenges

- Global Challenges:
- Climate change, deforestation
- Local Issues:
- Urban pollution, resource depletion

Conclusion

- Summary:
- Importance of experiential learning in NRM
- Call to Action:
- Adopt sustainable practices