AGLC4: 100 Marks & 4 Credits - **Humans and Natural Resources: Environmental Impact, Disaster Management, Sustainable Development**

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| **Unit** | **Broad Division** | **Detailed syllabus** | **Credit** | **Marks** |
| I | Mining and Environment | Environmental problems due to mining activities and their mitigation, Sustainable mining, conservation of minerals.Mining Legislations*-* Relevant sections/rules for restoration of Environment-The Mines Act 1952, The Mines Rules 1955, The Mines and Minerals (Development and Regulation) Act 1957; The Coal Mines Regulations 1957, The Metalliferous Mines Regulations 1966, The Mineral Conservation and Development Rules, 1988, The Mineral Concession Rule, 1960 | 1 | 25 |
| II | Sustainable Energy | Solar energy, its merits and limitation, solar devices: solar cooker, solar water heater, solar cells, wind energy (wind flour mill, wind mill pump), Hydroelectricity, Geothermal Energy, Tidal energy, Biomass energy | 1 | 25 |
| III | River Basin Management | Key Concepts in Fluvial Geomorphology, Bed Rock River and Alluvial Rivers, Rivers as threatened resource, rivers in Anthropocene, Characteristics, Importance of rivers in society, river ecology, River Health (sustain aquatic ecosystem), Human impact on river systems, Rivers and Flooding, Urban Floods, Flash Floods, Mega Floods | 1 | 25 |
| IV | Disaster Management | Natural hazards - Earthquake, Liquefaction, Landslides, Cyclone, Tornado, and Coastal Erosion | 1 | 25 |