This is for necessary information to all concerned that the classes of VAC 1 i.e. -Environmental Studies for all UG programs of 1st Semester (under CCFUP) for the academic session 2023-24 will be held according to the following sequential manner. Time(s) and venue(s) of the classes will be as stipulated in the central routine.

Class no.	Lecture by	Dept	Points to be highlighted
CLASS I	Dr. M.B. Arefin	Botany	Unit 1: Introduction to environmental studies • Multidisciplinary nature of environmental studies; • Scope and importance; Concept of sustainability and sustainable development.
CLASS 2	Dr. Krishnendu Sinha	Zoology	Unit 2: Ecosystems • What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: a) Forest ecosystem b) Grassland ecosystem
CLASS 3	Dr. Debnarayan Roy	Principal	Unit 2: Ecosystems c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)
CLASS 4	Dr. Susovan Mandal	Chemistry	Unit 3: Natural Resources: Renewable and Nonrenewable Resources - Land resources and land use change; Land degradation, soil erosion and desertification
CLASS 5	Sourav Barai	Zoology	Unit 3: Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations Joint forest management.
CLASS 6	Sanjib Kumar Das	Zoology	Unit 3: Water: Use and over exploitation of surface and ground water, floods, droughts, conflicts over water (international & interstate).
CLASS 7	Dr. Tapas Kumar Adalder	Chemistry	Unit 3: Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.
CLASS 8	Dr. Koushik Sen	Zoology	Unit 4: Biodiversity and Conservation • Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots • India as a megabiodiversity nation; Endangered and endemic species of India

CLASS 9	Md. Shariful Islam	Zoology	Unit 4: Threats to biodiversity: Habitat loss, poaching of wildlife, manwildlife conflicts, biological invasions; Conservation of biodiversity: Insitu and Exsitu conservation of biodiversity. • Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.
CLASS 10	Dr. Arghya Ghosh	Botany	Unit 5: Environmental Pollution • Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution.
CLASS 11	Srijit Ghosh	Physiology	Unit 5: • Nuclear hazards and human health risks. • Solid waste management: Control measures of urban and industrial waste.
CLASS 12	Saurav Paul	Botany	Unit 5: • Pollution case studies. • Noise pollution.
CLASS 13	Dr. Prasanta Patra	Chemistry	Unit 6: Environmental Policies & Practices • Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture.
CLASS 14	Dr. Tarun MIstri	Chemistry	Unit 6: • Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).
CLASS 15	Arabinda Samanta	Botany	Unit 6: Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context. • Environmental policy and gender issues.
CLASS 16	Dr. Nivedita Bhattacharyya	Physiology	Unit 7: Human Communities and the Environment • Human population growth: Impacts on environment, human health and welfare. • Resettlement and rehabilitation of project affected persons; case studies. • Disaster management: floods, earthquake, cyclones and landslides.

CLASS 17	Dr. Nabakumar Bera	Chemistry	Unit 7: • Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan. • Environmental ethics: Role of Indian and other religions and cultures in environmental conservation. • Environmental communication and
			public awareness, case studies (e.g., CNG vehicles in Delhi).

Countersigned: -

Principal

Jhargram Raj College Principal Jhargram Raj College

Envs. Sub Committee

• Copy to:

- 1. The Coodinator, IQAC
- 2. The Secretary, Teachers' Council
- 3. The Convenor, Routine Sub-Committee
- 4. The Convenor, Website Sub Committee
- 5. All concerned teachers
- 6. Guard file