D 115949 **(Pages : 3)** **Name.....**

Reg. No.....

FIRST SEMESTER M.B.A. DEGREE EXAMINATION, JANUARY 2025

(CUCSS)

M.B.A.

BUSIC05—ENVIRONMENT AND SUSTAINABILITY

(2024 Scheme)

Time : Three Hours Maximum : 60 Marks

Part A

Answer **all** *questions, each carries* 2 *marks.*

1. Define Biodiversity.
2. Define green taxes.
3. Define Sustainable development.
4. What is green funding ?
5. What is ecology ?

(5 × 2 = 10 marks)

Part B

Answer any **four** *questions from this part.*

Each question carries 4 *marks.*

6. What is an ecosystem ? Explain its biotic and abiotic components.
7. Explain the concept of a food chain. How does it relate to biodiversity ?
8. How can businesses promote eco-friendly manufacturing and packaging ?
9. Explain the process of conducting an Environmental Impact Assessment (EIA).
10. Briefly explain the international co-operation help in addressing global environmental issues ?
11. Discuss the role of energy management in sustainable development.

(4 × 4 = 16 marks)

Turn over

Part C

Answer any **three** *questions from this part.*
Each question carries 8 *marks.*

12. Evaluate the effectiveness of environmental regulations in controlling pollution.
13. Critically analyze the impact of human activities on biodiversity loss.
14. Analyse the role of corporate social responsibility in sustainable development.
15. What are the opportunities and risks associated with globalization for environmental sustainability ?
16. Explain the role of government policies in promoting environmental sustainability.

(3 × 8 = 24 marks)

Part D (Compulsory Question)

17. The Powell River Project is a co-operative programme of Virginia Polytechnic Institute Virginia Tech and the coal industry that conducts research and education programmes to advance mine restoration practice. Programme goals are to enhance restoration of mined lands and to benefit communities and businesses in south-western Virginia and adjacent areas of the central Appalachian coalfield. Funding is provided by industry, the university and the state. A Board of Directors establishes priorities and aids in the generation of funds, a staff solicits research proposals and disseminates research results, and university personnel conduct sponsored activities. A variety of factors indicate programme success, including advances in both industry environmental protection practices and regulatory standards. The success of Virginia Tech's Powell River Project shows the potential for industry/university co-operation to develop and aid implementation of mine restoration practices so as to aid sustainable development of coal-mining areas.

    Land use patterns and economic activity in south-western Virginia, and central Appalachia, are strongly influenced by its mountainous terrain. Extensive and rich deposits of high energy, low sulphur coal, suitable for both metallurgical and steam generation uses, have made coal mining a major industry. The terrain also creates challenges for the region's coal industry due to its effect on both mining operations and environmental protection practices. Within this region, the most

intensive uses of land occur in narrow valleys adjacent to rivers and streams, and transportation corridors. This landscape makes it costly to extend public infrastructure, is not conducive to agriculture, and hinders location by manufacturing facilities. Coal resource depletion and coal industry mechanisation are causing major declines in coal mine employment.

Questions :

(a) What are the major challenges faced by the Powell river project in south western Virginia due to the terrain.

(b) What are the suggestions to Virginia tech to overcome the challenges ?

(1 × 10 = 10 marks)