

Reg. No. :

Question Paper Code : 20996

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2022.

Fifth/Seventh Semester

Aeronautical Engineering

OAI 551 — ENVIRONMENT AND AGRICULTURE

(Common to Aerospace Engineering/Automobile Engineering/Civil Engineering/Environmental Engineering/Geoinformatics Engineering/Industrial Engineering/Industrial Engineering and Management/Manufacturing Engineering/Marine Engineering/Material Science and Engineering/Mechanical Engineering/Mechanical Engineering (Sandwich)/ Mechanical and Automation Engineering/Mechatronics Engineering/Production Engineering/Robotics and Automation/Bio Technology/Food Technology/Pharmaceutical Technology)

(Regulations 2017)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List any four water quality characteristics with its desirable levels for good agriculture practices.
2. How the globalization is expected to impact Agriculture produce in India?
3. Briefly state the impact of urbanization on Agriculture sector.
4. Discuss Watershed management for agriculture development.
5. List any two GHG with their respective GWP.
6. What are the impacts of Climate Change on water required for agriculture?
7. List any four principles of Ecological Farming.
8. How biological diversity influences agriculture practices?
9. Explain the concept of Vertical Farming.
10. State any two alternate culture systems for sustainable agriculture.

PART B — (5 × 13 = 65 marks)

11. (a) Discuss the landscape changes due to Urbanization that affects the agriculture sector.

Or

- (b) Comment on salient features of Agro Ecosystems.

12. (a) List any two impacts of both deposition and erosion of soil in agriculture farm management.

Or

- (b) Write briefly on the impacts of agriculture drainage on environment.

13. (a) List any four reasons of desertification due to Climate Change.

Or

- (b) How does global warming influence the changes in the ecosystems?

14. (a) State any two salient features to characterize Ecological Diversity.

Or

- (b) How does the climate change influence the forest fragmentation?

15. (a) State any four farm practices that are must for sustainable agriculture.

Or

- (b) How does the virtual water trade influence the local agriculture environment?

PART C — (1 × 15 = 15 marks)

16. (a) How does the global Warming influence scarcity of water required for agriculture? Explain in detail.

Or

- (b) Evaluate the agriculture biotechnology concerns in facilitating sustainable agriculture.