

Reg. No. :

**Question Paper Code : 20697**

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

Second/Third/Fourth/Fifth/Sixth/Seventh Semester

Aeronautical Engineering

GE 8291 – ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to Aerospace Engineering/Agriculture Engineering/Automobile Engineering/Biomedical Engineering/Civil Engineering/Computer Science and Engineering/Computer and Communication Engineering/Electrical and Electronics Engineering/Electronics and Communication Engineering/Electronics and Instrumentation Engineering/Electronics and Telecommunication Engineering/Environmental Engineering/Geoinformatics Engineering/Industrial Engineering/Industrial Engineering and Management/Instrumentation and Control Engineering/Manufacturing Engineering/Marine Engineering/Material Science and Engineering/Mechanical Engineering/Mechanical Engineering (Sandwich)/Mechanical and Automation Engineering/Mechatronics Engineering/Medical Electronics Petrochemical Engineering/Production Engineering/Robotics and Automation/Safety and Fire Engineering/Artificial Intelligence and Data Science/Bio Technology/Biotechnology and Biochemical Engineering/Chemical Engineering/Chemical and Electrochemical Engineering/Computer Science and Business Systems/Fashion Technology/Food Technology/Handloom and Textile Technology/Information Technology/Petrochemical Technology/Petroleum Engineering/Pharmaceutical Technology/Plastic Technology/Polymer Technology/Textile Chemistry/Textile Technology)

(Regulations 2017)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Write the scope and importance of studying Environment.
2. What do you mean by Endangered and Endemic Species?
3. Write the various causative factors for landslides.
4. Write the difference between cyclone, hurricane, and storm.

5. Write the major effects of pesticides on Environment.
6. Write the major environmental effects of sand quarrying.
7. Define sustainable Development.
8. What is Global Warming and Green house Effect?
9. What is Value Education?
10. What is Human Rights?

PART B — (5 × 13 = 65 marks)

11. (a) With the help of neat sketch explain Aquatic Ecosystem.  
Or  
(b) Write the various threats to Biodiversity and how biodiversity can be conserved scientifically and legally.
12. (a) Write the major sources of water pollution and how the water pollution can be controlled.  
Or  
(b) What are the major sources of Marine pollution, their adverse effects on environment and the methods of controlling the marine pollution.
13. (a) Write the various economic and environmental uses of Forest and its resources.  
Or  
(b) Write the major environmental effects of extracting and processing of mineral resources.
14. (a) With the help of neat diagram explain the process of rain water harvesting.  
Or  
(b) Write an essay on Wild Life Protection Act.
15. (a) Write an essay on the adverse effects of population explosion and how the population growth can be controlled.  
Or  
(b) How far the Information Technology can be effectively used for conserving environment and improving the human health.

PART C — (1 × 15 = 15 marks)

16. (a) Write an essay on the Water (prevention and control of pollution) Act and discuss how far it is effective in controlling water pollution in India.

Or

- (b) Write the powers and functions of various Central and State Statutory bodies in controlling the pollution in India.