

Reg. No. :

Question Paper Code : 71636

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2015.

Fifth Semester

Mechanical Engineering

GE 2021/GE 32/GEU 024/080100016/080380015 — ENVIRONMENTAL SCIENCE
AND ENGINEERING

(Common to Sixth Semester – Petroleum Engineering, Fifth Semester –
Aeronautical Engineering, Automobile Engineering, Electronics and
Communication Engineering, Production Engineering, Mechanical and Automation
Engineering and Petrochemical Engineering, Fourth Semester – Biomedical
Engineering and Geoinformatics Engineering, Third Semester – Civil Engineering,
Computer Science and Engineering, Information Technology, Textile Chemistry,
Pharmaceutical Technology and Petrochemical Engineering)

(Also Common to HS 1201 – Environmental Science and Engineering for Fifth
Semester – Electronics and Communication Engineering, Fourth Semester –
Biomedical Engineering and Third Semester – Computer Science and Engineering
and Information Technology also common to 10177 GE 001 for Fifth Semester –
Aeronautical Engineering, Automobile Engineering, Electronics and Communication
Engineering, Mechanical Engineering and Textile Technology, Fourth Semester –
Biomedical Engineering, Third Semester – Civil Engineering, Computer Science and
Engineering and Information Technology)

(Regulation 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define food web.
2. List some of the hot spots of biodiversity in India.
3. Give the hazards caused by marine pollution.
4. Define BOD₅.
5. Give any two problems associated with chemical fertilizer usage.

6. Define eutrophication.
7. What is acid rain?
8. What is sustainability in context to environment?
9. Expand HIV.
10. What is value education? Give its significance.

PART B — (5 × 16 = 80 marks)

11. (a) Describe the structure and function of fresh water ecosystem.

Or

- (b) Explain the various threats to biodiversity along with the means to conserve them.

12. (a) Explain the health effects and control measures of air pollution.

Or

- (b) (i) Explain about the global health effects of nuclear war.
(ii) Give in detail the role of an individual to prevent and control the municipal solid waste generation.

13. (a) Describe the problems associated with the over exploitation of forest resources.

Or

- (b) (i) What is Chipko movement? (4)
(ii) Describe about renewal resources and their advantages and disadvantages. (12)

14. (a) Write short notes on :

- (i) Wild life protection Act. (5)
- (ii) Role of Central and State Pollution Control Boards (6)
- (iii) Rain water harvesting. (5)

Or

- (b) Describe the issues about climate change and give solutions for solving this problem.

15. (a) Describe the role of information technology in environment and human health.

Or

- (b) Write short notes on :

- (i) Population explosion (8)
- (ii) Role of an individual in conservation of natural resources. (8)
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