M.E. (Water Resources & Hydraulic Engineering) Examination, 2025

(1st Semester)

ENVIRONMENTAL LAWS & IMPACT ASSESSMENT

Paper Code: PG/WRE/PE/T/113C

(Program Elective-1)

Time: Three Hours | Full Marks :100

Answer any ***five*** questions.

1. (a) State the objective of the Environmental Impact Assessment.

(b) State the key deliverables of the Air (Prevention and Control of Pollution) Act, 1981.

(c) Which act regulates vehicular pollution in India, and when was it enacted?

(d) In a Peri-urban area, population is near about 10000, are generated solid waste 200 mg/capita/day in two different containers (organic and inorganic) with density 500 kg/m^3. Find out the volume of solid waste generated per family considering 6 persons per family for organic as well as inorganic waste. Design household composting over ground compost tank having diameter 1.1 m and height 0.8 m. Assume any date if required as per Solid Waste (Management and Handling) Rules, 2000 & 2016.

5+5+2+8=20

2. (a) State the primary objective of the Solid Waste Management Rules, 2016.

(b) State the function of the Disaster Management Authority

(c) Write down the different Governing Bodies' functions in Disaster Management

(d) Discuss the salient features of the windrow process of composting.

(e) Write a short note on the Coastal Regulation Zone Act

4+3+ 5+5+3=20

3. (a) Write down the typical composition of C&D waste in India.

(b) State the initiatives taken by CPWD and IRC to promote the recycling of C&D waste in India.

(c) How can the quantity of C&D Waste be assessed?

(d) Give a brief idea about the Waste Generation Rate method for the quantification of C& D Waste.

5+5+7+5=20

4. (a) Mention the criteria for NABL recognition in the case of a drinking water testing laboratory.

(b) Explain with a flow diagram, the process of getting NABL recognition.

(c) How does NABL accreditation enhance the credibility of a laboratory?

(d) Write in brief about the scope of NABL recognition. 5+5+4+6=20

5. (a) Discuss the key objectives and challenges of India's National Energy Policy (NEP).

(b) Describe the working of Energy & Environment Management Systems (EEMS) and their benefits.

(c) Critically evaluate the impact of BEE's initiatives on energy conservation in India.

(d) Explain different energy tariff structures and their impact on energy consumption.

6+5+4+5=20

6. a) What are the major causes of air pollution in urban areas?

b) How does soil degradation impact food security?

How does climate change affect global weather patterns, and what can be done to mitigate these effects?

c) What are the key challenges in addressing global ocean pollution, and how can countries cooperate to resolve this?

d) What is the importance of biodiversity for national economies and ecosystems?

e) What major international organization was established as a result of the Stockholm Conference?

f) What were the main goals of the Kyoto Protocol?

g) When and where the Ramsar Convention was adopted and what is the main objective and significance of the Ramsar Convention on Wetlands?

h) How does the Ramsar Convention encourage the sustainable use of wetlands?

2+2+2+2+2+2+2+4+2=20