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**Presidency University**

**Bengaluru**

**SCHOOL OF ENGINEERING**

**MAKE UP EXAMINATION – SEP 2023**

**Course Code**: CIV 280

**Course Name**: Environmental Impact Assessment

**Program** : B.Tech

**Date**: 06.10.2023

**Time**: 01:00 PM to 04:00 PM

**Max Marks**: 100

**Weightage**: 50%

**Instructions:**

1. *Read the all questions carefully and answer accordingly.*
2. *Question paper consists of 3 parts.*

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**Part A**

**Answer all the Questions (6Qx 5M= 30M)**

1. Well planned and appropriately implemented public involvement programmes will contribute to EIA studies and to the successful design, implementation, operation and management of proposals. Define public participation? Distinguish the ‘public’ and ‘public concerned’ means.

(C.O.No.3) [Knowledge]

1. Environmental Impact Assessment (EIA) is the systematic identification and evaluation of the potential impacts of the proposed project, plans, programs or legislative actions relative to the physical-chemical, biological, cultural and socioeconomic components of the total environment. List any six guiding principles of EIA. (C.O.No.1) [Knowledge]
2. Mitigation is the design and execution of measures to reduce, mitigate, or minimize the negative impacts of a project, work, or activity on human or natural environments. Explain the framework for impact mitigation with neat schematic diagram. (C.O.No.3) [Knowledge]
3. Environmental Audit can be defined as a basic management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organizations, management systems and equipment are performing. Enlist any five benefits of environmental auditing. (C.O.No.4) [Knowledge]
4. Environmental Impact Assessment (EIA) is used to identify the environmental and social impacts of a proposed project prior to decision-making in order to predict environmental impacts at an early stage in project planning and design. List and explain three core values of Environmental impact assessment. (C.O.No.1) [Knowledge]
5. There are many natural and anthropogenic actions contaminates the lentic and lotic water sources. Differentiate point and nonpoint source of water pollution. (C.O.No.2) [Knowledge]

**Part B**

**Answer all the Questions. (4Qx10M=40M)**

1. One of the major impacts of many actions is on air quality in the vicinity of the project area. List and explain the basic steps for prediction and assessment of impacts on the Air Environment. (C.O.No.1) [Comprehension]
2. TheWind and atmospheric condition are the two major factors affects transport and dispersion of air pollutants. Explain how unstable atmosphere during summer and stable atmosphere during winter affects the dispersal of polluted air with figures. (C.O.No.2) [Comprehension]
3. Public participation was made mandatory in environmental impact assessment (EIA) process by making amendment to 1994 original notification of EIA. When drawing up a citizen participation plan in EIA, State Pollution Control Board (SPCB) should brief about the project. List the appropriate questions should be briefed by the SPCB. (C.O.No.3) [Comprehension]
4. The major purpose of Environmental auditing is to minimize negative impacts, enhance positive impacts and ensuring environmentally sustainable planning construction and operations management. The International Chamber of Commerce presents the different steps of an environmental auditing include pre-audit activities, site activities and post audit activities. Enlist and explain any five scopes of environmental auditing. (C.O.No.4) [Comprehension]

**Part C**

**Answer all the Questions. (2Qx15M=30M)**

1. Impact identification and impact analysis are the significant steps in EIA process. There are five different Methods of Environmental Impact Identification suggested by Warner 1973 for detail impact analysis.

a) Identify the impact identification method which integrates impact causes and consequences through primary, secondary and tertiary effects and discuss the advantages and disadvantages of it.

b) Identify the impact identification method which provide us a framework of interaction of different activities and impacts of the project and discuss advantages and disadvantages of it. (C.O.No.4) [Comprehension]

1. Checklist method of impact identification is done to assess the nature of the impacts i.e. its type such as adverse /beneficial, short term or long term, no effect or significant impact, reversible or irreversible etc. Enlist the methods of checklists and discuss the advantages and disadvantages of it. (C.O.No.4) [Comprehension]