

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

SET-B

**SCHOOL OF ENGINEERING
END TERM EXAMINATION - MAY /JUNE 2024**

Semester : Semester VIII - 2020

Course Code : CIV2005

Course Name : Environmental Impact Assessment

Program : B.Tech.

Date : May 29, 2024

Time : 1:00 PM - 4:00 PM

Max Marks : 100

Weightage : 50%

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

PART A

Answer any 10 questions

10*2M=20M

1. EIAs strive to ensure that development projects coexist with a healthy environment, promoting a high quality of living for all. Define EIA and what are the purposes of EIA?
(CO1) [Knowledge]
2. EIA is a systematic process that assesses the potential environmental effects of a proposed project or activity. Enlist the guiding principles of EIA.
(CO1) [Knowledge]
3. What are the key characteristics that define non-point source pollution?
(CO1) [Knowledge]
4. An environmental management plan outlines steps to reduce and address any major environmental harms caused by a project. Define mitigation in EIA?
(CO2) [Knowledge]
5. The environmental management plan identifies measures to mitigate and compensate significant environmental impacts. What are the principles of mitigation?
(CO2) [Knowledge]
6. The Basic Assessment process entails an assessment of the description of the environmental attributes of the site and an investigation into issues and potential impacts. List any four objectives of mitigation in EIA.
(CO2) [Knowledge]
7. Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development. Define public participation in EIA process.
(CO2) [Knowledge]
8. List the major challenges in EIA and Environmental planning in water resource development.
(CO2) [Knowledge]

9. Mining is the process of extracting materials from the ground, including metals and minerals like coal, gold, silver, and iron. List the types of mining operation.
(CO3) [Knowledge]
10. The ore is always mixed with unwanted or valueless rocks and minerals that are collectively known as gangue. Define ore minerals and name two types of ore.
(CO3) [Knowledge]
11. In subsurface mining, a long tunnel is created either horizontally or vertically. List the process of minerals extraction in ores.
(CO3) [Knowledge]
12. Miners working in different type of mines suffer from asbestosis, silicosis, black lung disease. List four ways to minimize the effects of the mining industry.
(CO2) [Knowledge]
13. List any one remedial measure in thermal power plant for a) NO_x control b) Fugitive Dust control.
(CO3) [Knowledge]
14. A nuclear power plant is a thermal power station that uses a nuclear reactor to generate heat, which is then used to produce electricity. List the legal issue faced in Jaitapur nuclear project.
(CO2) [Knowledge]

PART B

Answer any 10 questions

10*4M=40M

15. Environmental Impact Assessments (EIAs) empower decision-makers with a clearer picture of potential environmental consequences, leading to more informed choices. Compare benefits and Flaws of EIA.
(CO1) [Comprehension]
16. The growing noise levels in our cities highlight the urgent need for solutions to tackle noise pollution. Explain the primary sources of noise pollution in urban environments?
(CO1) [Comprehension]
17. City dwellers are bombarded with unwanted noise exceeding 85 decibels, a constant assault from traffic, subways, factories, and airplanes. List any two major air pollutants and explain their sources and effects.
(CO1) [Comprehension]
18. Environmental Impact Assessments (EIAs) ensure projects are tailored to the local environment by identifying potential impacts and informing adjustments to the design before construction begins. List and define any five properties of sound.
(CO2) [Comprehension]
19. Depending on the timing of the project cycle and the nature of impacts a number of approaches can be taken to achieve the objectives of mitigation. Write down the approaches that can be taken to achieve the objectives of mitigation.
(CO3) [Comprehension]
20. List and explain the techniques to achieve public participation.
(CO3) [Comprehension]
21. List the key principles for public involvement.
(CO2) [Comprehension]
22. List any eight environmental issues related to water resource development project.
(CO2) [Comprehension]
23. Explain the large-scale mining and small-scale mining process.
(CO3) [Comprehension]

24. EIA plays a vital role in ensuring that high-impact projects are developed responsibly, minimizing environmental damage and promoting sustainable development practices. List the positive and negative impact of highway project. (CO3) [Comprehension]
25. Ores form from the cooling and crystallization of minerals within magmas, lavas, or igneous intrusions. Explain the methods of mineral ore mining. (CO2) [Comprehension]
26. Write the brief note on importance of Jaitapur nuclear project. (CO3) [Comprehension]
27. In thermal generating stations coal, oil, natural gas etc. are employed as primary sources of energy. Explain the working principle of thermal power plant. (CO2) [Comprehension]
28. Discuss the impact of Coal Bed Methane (CBM) mining on water bodies. (CO3) [Comprehension]

PART C

Answer any 4 questions,

4*10M=40M

29. Events like fires, windstorms, and mudslides can disrupt streams, causing significant changes in temperature, water clarity (turbidity), and other water quality factors. Explain the steps involved in the prediction and assessment of water quality. (CO1) [Application]
30. EIA is an independent review process using data and studies to assess a project's environmental impact before approval. Discuss the different stages of EC process with rough timeline flow chart. (CO1) [Application]
31. Draw and explain the framework for impact mitigation. (CO2) [Application]
32. Depict successful participation process cycle in EIA projects. (CO3) [Application]
33. Discuss the potential socio-economic impact of highway project. (CO2) [Application]
34. In strip mining, instead of creating one large pit in the ground, long narrow strips are dug out. Explain the process of mineral extraction in ores. (CO3) [Application]