



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Eighth Semester, B.E. - Civil Engineering
Semester End Examination; May / June - 2019

Environmental Impact Assessment

Time: 3 hrs

Max. Marks: 100

Note: Answer FIVE full questions, selecting ONE full question from each unit.

UNIT - I

- | | | |
|------|---|---|
| 1 a. | What is Environmental Impact Assessment? Write a brief note on role of NEPA in Environmental Impact Assessment. | 8 |
| | b. With neat flow chart, establish the relationship between EIA / ETS and FONSI. | 8 |
| | c. Discuss the limitations of EIA. | 4 |
| 2 a. | Illustrate the framework of Environmental Impact Assessment. | 6 |
| | b. With the help of a flow diagram, explain step-by-step procedure for carrying out EIA and EIS. | 8 |
| | c. Comment on various levels of processing draft EIS with its importance before preparing final EIS. | 6 |

UNIT - II

- | | | |
|------|---|----|
| 3 a. | What is an environmental attribute? List various environmental components that are of importance in conducting EIA. | 12 |
| | b. List various methods that are commonly adopted to carry out EIA and explain overlay method with its merits and demerits. | 8 |
| 4 a. | Illustrate various attributes of environmental significance with their effect of;
i) Air ii) Sound iii) Land components of environment | 12 |
| | b. Citing suitable example, explain matrices method of conducting EIA with its merits demerits. | 8 |

UNIT - III

- | | | |
|------|--|----|
| 5 a. | List various sources of air pollution and explain their effects so as to predict and assess their impacts. | 12 |
| | b. Discuss the noise environment, sources, effects and mitigation measures to reduce noise. | 8 |
| 6 a. | List various important attribute of water environment and explain their role in prediction and assessment of impact due to an action. | 12 |
| | b. Citing suitable example, explain the steps involved in prediction and assessment of impact of particulate matters in air environment. | 8 |

UNIT - IV

- | | | |
|------|--|----|
| 7 a. | Illustrate the steps by step procedure for predicting and assessment of impact on soil environment. | 10 |
| | b. Citing suitable instance, explain the merits and demerits of public participation in EIA and EIS. | 10 |
| 8 a. | Comment on various attribute that are to be considered in prediction and assessment of impact on ground water. | 10 |
| | b. List and explain steps involved in prediction and assessment of impact on soico-economic environment with special reference to resources attribute. | 10 |

UNIT - V

- | | | |
|-----|---|----|
| 9. | Illustrate the checklist method for conducting environment Impact for a water resource project. | 20 |
| 10. | Explain the matrix method of conducting environmental impact assessment for a highway Project. | 20 |