2008 ANNA UNIVERSITY B.E/B.TECH III SEMESTER

ELECTRONIC COMMUNICATION ENGINEERING ENVIRONMENTAL SCIENCE AND ENGINEERING

TIME: 3 HOUR MARK: 100

Answer All Question



PART A – $(10\times2=20 \text{ marks})$

- 1. What are renewable and non-renewable energy resources? Give examples.
- 2. Mention the factors causing soil erosion?
- 3. What are autotrophic and heterotrophic components of an ecosystem? Give examples.
- 4. What is ecological succession? Mention their types.
- 5. Classify air pollutants with suitable examples.
- 6. What is meant by BOD and COD?
- 7. How does ozone layer depletion take place? Write its consequences
- 8. What is meant by sustainable development?
- 9. Define population explosion.
- 10. Write the expansion for HIV and AIDS.

PART B $-(5\times16=80 \text{ marks})$

- 11. (a) Discuss briefly the ill-effects of deforestation.
- (b) Explain the benefits and problem of constructing dams.
- (c) Write short notes on the problem of fertilizers and pesticides on modern agriculture.

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- 12. (a) Write an explanatory note on any two non-conventional energy resources.
- (b) Discuss the uses and effects of over-utilization of surface and ground water sources.
- 13. (a) Define ecological pyramid and write a short notes on their types.
- (b) What is biodiversity? Discuss the genetic biodiversity and values of biodiversity.

Or

- 14. (a) Write short notes on energy flow in the ecosystem and food web.
- (b) What do you understand by conservation of biodiversity? Explain the 'Insitu and Exsitu conservation along with their merits and limitations'.
- 15. (a) Name and discuss the effects of water pollution. Suggest the various control and remedial measures to curb water pollution.
- (b) Write brief notes on solid waste management.

- 16. (a) Explain the effects of air pollution on human health, plants and animals.
- (b) What is an earthquake? Enumerate its effects? Briefly explain the measures should be taken to mitigate this disaster.
- 17. (a) What is 'rainwater harvesting'? Name and discuss in brief the types of rainwater harvesting.
- (b) Write note non salient features of environmental protection act.

Or

- 18. (a) Write brief note on global warming and acid rain.
- (b) Discuss the issues involved in the enforcement of environmental legislation.
- 19. (a) Enumerate the effects population explosion.
- (b) What is 'value education'? Discuss the concept of values education with the help of suitable examples.

Or

- 20. (a) Discuss the problems, diagnosis and control and AIDS.
- (b) Discuss in detail the role of IT in protecting environment.