

BOARD OF TECHNICAL EDUCATION

PORVORIM-GOA

November, 2008 Examinations

Programme: COMMON

Course/Subject: ENVIRONMENTAL ENGINEERING (3012)

Time Duration: 3 Hrs.

Max. Marks: 100

INSTRUCTIONS: 1. All Questions are compulsory.
2. Figures to the right indicate full marks.
3. Assume suitable additional data if required.

- Q.No.1. Answer any Five:- 5x4= 20
- Write down the importance of environmental protection of renewable and non-renewable energy resources.?
 - What are the effects of discharging waste water into the environment ?
 - Write the causes of water pollution.
 - What are the effects of air pollutants on human health ?
 - What are the environmental impacts of construction of large dams ?
 - What are the benefits of pollution abatement ?
 - What are the functions of state pollution control Board ?
- Q.No.2. Answer any Two: 2x8=16
- What is deforestation and what is the need to protect and preserve our forests ?
 - Write in brief on the structure and function of an ecosystem.
 - Write down the relevance of biodegradable and non-biodegradable wastes in nature.
- Q.No.3. Answer any Two:- 2x8=16
- What is meant by eutrophication ? Explain with reference to a dying lake.
 - Explain how disinfection of water is carried out by ozonisation and by U.V treatment.
 - Explain in brief the chemical method of treatment of waste water.
- Q.No.4. Answer any Two:- 2x8=16
- What is the effect of wind and temperature on pollutants behaviour ?
 - Write in brief the control measures of air pollution.
 - Explain giving examples the various physical and chemical techniques for specific pollutants.
- Q.No.5. Answer any Two:- 2x8=16
- What are the general constituents of municipal solid waste. Write in brief on any one technique for safe disposal of this solid waste.
 - Write down the effect and control measures of noise pollution.
 - What do you understand by green house effect and acid rain ?
- Q.No.6. Answer any Four:- 4x4=16
- What are the objectives of the environment (Protection) Act 1986 ?
 - What is meant by ozone layer depletion ? What is its impact on environment ?
 - What are the causes of oil pollution ?
 - Write in brief on ocean contamination.
 - What are the sources of noise pollution ?
 - What are the impacts of carbon monoxide and sulphur dioxide on human health. ?

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PORVORIM-GOA

May/June, 2009 Examinations

Programme: COMMON

Course/Subject: ENVIRONMENTAL ENGINEERING (3012)

Time Duration: 3 Hrs.

Max. Marks: 75

INSTRUCTIONS: 1.All Questions are compulsory.
2.Figures to the right indicate full marks.
3.Assume suitable additional data if required.

- Q.No1. Ans. the following:- 5x3=15
- a) Define ecology and ecosystem.
 - b) Water is a Scarce resource. Justify.
 - c) What are the global effects of air pollution?
 - d) What are the different ways of controlling emission of air Pollutants at source?
 - e) List out the diseases caused by the polluted water.
- Q.No.2. Ans. the following:- (Any two) 2x6=12
- a) Explain in brief (i) Carbon and (ii) Nitrogen cycle.
 - b) "Marine water pollution by oil spills" is a concern. Discuss.
 - c) What is the environmental impact of deforestation?
- Q.No.3. Ans. the following:- (Any two) 2x6=12
- a) With the help of a flow sheet diagram explain the steps of Water treatment system.
 - b) Discuss in brief any two methods of water pollution abatement.
 - c) Write note on causes & effects of Eutrophication.
- Q.No.4. Ans. the following:- (Any two) 2x6=12
- a) Discuss the effect of the following meteorological conditions on air pollutant behaviour.
(i) Wind and (ii) Temperature.
 - b) Write note on Indoor air Pollution.
 - c) Explain the effects of air pollutants on (i)Plants (ii) Buildings.
- Q.No.5. Ans the following:- (Any two) 2x6=12
- a) What are the general constituents of municipal solid Waste?
What is the advantage of Segregation of garbage from rubbish?
 - b) Explain the following methods of solid waste disposal
(i) land filling and (ii) Composting.
 - c) What is the effect of noise pollution on human health?
- Q.No.6. Ans. the following:- (Any two) 2x6=12
- a) State the noise intensity levels and allowable limits for different situations.
 - b) Write short notes on:
 - i) acid gain - Causes & effects
 - ii)Ozone layer depletion.
 - c) Discuss the provisions under Environmental Protection Act - 1986.