

**1st Semester Diploma Engineering
Exam., 2016**

**ENVIRONMENTAL ENGINEERING AND
DISASTER MANAGEMENT**

Paper : EDM-103

Full Marks : 70

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

FIRST HALF

Answer Question No. **1** and *any three* from the rest

1. Answer the following questions as directed : $1 \times 8 = 8$

- (a) Define turbidity of water.
- (b) What is the allowable limit of intensity level of sound in urban areas?
- (c) What are the sources of air pollution?
- (d) What is impulse noise?
- (e) What is the limit of solids and suspended solids in water?
- (f) What is the allowable limit of hardness in water?

(g) What is sewage?

(h) World Environmental Day observed on 5th July. (Write True or False)

2. (a) Give the characteristics of aerosol.

(b) Differentiate between primary pollutant and secondary pollutant.

(c) Write a note on greenhouse effect. $3+3+3=9$

3. (a) What is soil pollution?

(b) How to control soil pollution? $3+6=9$

4. (a) What is biomagnification?

(b) Write a short note on pulverization.

(c) What is biogas? $5+3+1=9$

5. (a) What is noise and intensity of noise?

(b) What are the control techniques of noise pollution?

(c) What is the unit of measurement of noise? 9

6. (a) What is dissolved oxygen (DO)?

(b) What are the common impurities in water?

(c) Write down the working method of cyclonic scrubber.

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SECOND HALF

Answer Question No. 7 and any **three** from the rest

7. Answer the following as directed : $1 \times 8 = 8$

(a) What is shear wall?

(b) What is lithology?

(c) What is flood wall?

(d) What is epicentral distance?

(e) Write the full form of NIDM.

(f) Tripura lies in _____ seismic zone.

(Fill in the blank)

(g) What is GPS system?

(h) What do you mean by permeability of soil?

8. (a) What is landslide?

(b) What are the causes of landslide?

- (c) What are the measures to mitigate landslide? $2+4+3=9$
9. (a) What is seismic wave? Write the types of seismic wave.
- (b) Define magnitude and intensity of earthquake.
- (c) Write about Do's or Don't for the protection of life and properties during earthquake. $3+2+4=9$
10. (a) Discuss disaster management cycle.
- (b) What are the characteristics of a fire-resistive building? $3+6=9$
11. (a) What is cyclone?
- (b) What are the effects of cyclone?
- (c) What are tectonic and non-tectonic earthquakes? $1+5+3=9$
12. (a) What do you mean by Tsunami?
- (b) What are the bends provided in RCC building to resist the earthquake load?
- (c) Write a short note on rotational landslide. $3+3+3=9$