

B.Sc. (Part-III) (CBCS Pattern) Semester - V  
**USENV DST-09 - Environmental Science Paper-I (Environmental Engineering)**

P. Pages : 2

Time : Three Hours



**GUG/S/23/13101**

Max. Marks : 50

- Notes : 1. All questions are compulsory and carry equal marks.  
2. Illustrate the answers with suitable diagrams and examples.

**1. Describe method of solid waste sample preparation for estimation of different parameters. 10**

**OR**

a) Explain quartering method of soil sampling. 5

b) Discuss procedure for particulate matter sampling. 5

**2. Discuss classification of instrumental method based on physical properties measurement. 10**

**OR**

a) Briefly explain determinant and indeterminate errors. 5

b) Explain molecular spectroscopy. 5

**3. Discuss maintenance procedure of agitator and clarifloculator. 10**

**OR**

a) Briefly explain operation startup procedure of aeration tank. 5

b) Explain operation procedure of settling tank. 5

**4. Discuss nature and structure of planning. 10**

**OR**

a) Explain component of environmental management. 5

b) Write about corporate environmental planning. 5

**5. Answer in brief any ten. 10**

a) What is grab water sampling?

b) Which device is used to collect water sample?

c) Which device is used for the sampling of noise?

d) Define error.

- e) What is spectroscopy?
- f) Give the full form of GC.
- g) What is the use of aeration tank?
- h) How equalization tank works?
- i) What is the purpose of dosing tank?
- j) Define decision making.
- k) Write about effective planning.
- l) What is CSR?

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