U.G. 5th Semester Examination - 2020

ENVIRONMENTAL SCIENCE

Course Code : BENVDSHT1 [DSE 1]

Course Title: Environmental Pollution and Monitoring Techniques

Full Marks : 40 Time : 2 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any **ten** questions of the following:

$1 \times 10 = 10$

a) Mention one nuclear accident.

b) What is standard deviation?

c) What is Integrated Pest Control?

d) What is quantitative sample?

e) What is radioactive fall out?

f) What is Insect Growth Regulator?

g) What is ouch-ouch disease?

h) What is optical density?

i) What is atonizer?

j) What is co-precipitation?

k) Mention the name of one pesticide.

l) Mention two sources of heavy metals.

m) Write down the full form of DDT.

n) What is class boundary?

o) Define mean.

2. Answer any **five** questions of the following:

$2 \times 5 = 10$

a) What are heavy metals?

b) What is random sampling?

c) What is nuclear weapon?

d) What is radiation pollution?

e) What is titrant?

f) What is coliform in water sample?

g) Mention the components of a potentiometric cell.

h) Find out the median value of the following data:

345, 243, 468, 291, 572, 366, 270

3. Answer any **two** questions: $5 \times 2 = 10$

a) Write down the principle of gravimetry.

b) Briefly discuss different categories of pesticides.

c) Discuss different sources of radiation pollution.

4. Answer any **one** question: $10 \times 1 = 10$

a) What is the cumulative frequency? Find out the standard deviation of following data :

Class :	20-30	30-40	40-50	50-60	60-70
frequency :	12	2	5	10	8

b) Briefly discuss the procedure of viable plate count. Distinguish between Grab and composite sampling. 6+4

c) Write down the environmental application of titrimetry. Briefly discuss the characteristics of LASER. 6+4