

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU – 27

B.Sc. ENVIRONMENTAL SCIENCE – V SEMESTER

SEMESTER EXAMINATION: OCTOBER 2019

**ES – 5215: ENV. SANITATION, HEALTH & SAFETY AND ENV. TOXICOLOGY**

TIME: 2½ HOURS

MAX MARKS: 70

This question paper comprises of 3 parts and one printed page

Instruction: Draw diagrams wherever necessary

**PART – A**

Answer any ten of the following

10X2 = 20

1. What is solid waste? Cite two examples of urban solid waste.
2. Mention the methods of recovery of materials.
3. What are biomedical wastes?
4. What is dosimetry?
5. Define noise pollution. Define a decibel.
6. What is Bagassosis?
7. What is 'black-lung' disease? List its symptoms.
8. What is wildlife toxicology?
9. What is a toxin? Cite an example.
10. What is LD<sub>50</sub>?
11. What is virtual safety?
12. Compare 'no effect level' and ADI.

**PART – B**

Write explanatory notes on any four of the following

4X5 = 20

13. Plastic management rules, 2016
14. Pyrolysis
15. Control measures of noise
16. Salient features of the ESI Act, 1948
17. Bioassay- its objectives and types.
18. Experimental factors affecting toxicity studies.

**PART – C**

Answer all the questions

3X10 = 30

19. Provide a detailed account of urban solid waste management.

**OR**

With the help of a sketch, explain the functioning of the municipal solid waste incinerator.

20. Discuss the various impacts of radiation on human beings.

**OR**

Discuss the protocols involved in hazardous waste management.

21. Explain the experimental design of chronic toxicity studies.

**OR**

Describe the various categories of toxic effects.