

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**MSc DEGREE EXAMINATION MAY 2018
(Second Semester)**

Branch – ENVIRONMENTAL SCIENCE

SOIL POLLUTION AND SOLID WASTE MANAGEMENT

Time : Three Hours

Maximum : 75 Marks

Answer **ALL** questions
ALL questions carry **EQUAL** marks (5 x 15 = 75)

- 1 a Define the composition of soil and write notes on its basic properties. (7)
- b What are the major micronutrients in soil and how it is significant? (8)
- OR
- c Outline the sources of heavy metals in soil. (7)
- d List out the agro-chemicals in soil and its toxicity. (8)
- 2 a What is the composition of municipal solid waste in Indian cities and how it varies? (8)
- b Can we improve solid waste management methods in India? Suggest. (7)
- OR
- c Explain the process of composting and vermi-composting with neat sketch. (15)
- 3 a Discuss the various methods to manage e-waste. (7)
- b Discuss different types of hazardous waste treatment methods. (8)
- OR
- c Illustrate the recycling methods of hazardous wastes. (8)
- d Write notes on safe means of storage and transportation of hazardous wastes. (7)
- 4 a State the salient features of Environmental Protection Act 1986. (7)
- b How fly ash can be effectively used? Discuss pros and cons. (8)
- OR
- c Discuss about the Manufacture, Storage and Import of Hazardous Chemical Rules – 1989. (5)
- d Briefly explain Chemical Accidents Rules 1996. (10)
- 5 a How to treat infectious wastes? Explain. (7)
- b Briefly explain E-waste (Management and Handling) Rules 2011. (8)
- OR
- c Write notes on (i) Recycled Plastics Manufacture and Usage Rules - 1999 (ii) Classification of biomedical wastes. (15)