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PG/IIS/ELC/204(A & B)/25  
(CBCS)

**M.Sc. 2nd Semester Examination, 2025**

**ELECTRONICS**

**PAPER – C-ELC-204(A & B)**

*Full Marks : 50*

*Time : 2 hours*

**Answer all questions**

*The figures in the right hand margin indicate marks*

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

**UNIT-I : C-ELC – 204A**

*( E-Waste )*

**GROUP – A**

**Answer any two questions : 2×2**

1. What do you understand by the term 'e-waste'?

*( Turn Over )*

2. What are the main sources of e-waste ?
3. Mention top ten states with volume of production of e-waste in India.
4. Write the components of e-waste management.

**GROUP – B**

**Answer any two questions :                      4 × 2**

5. List the Hazardous substances in e-waste.
6. Discuss e-waste recycling process.
7. Describe the importance of Basel convention for low-economic countries.
8. Explain the extended producer responsibility (EPR).

( 3 )

**GROUP – C**

**Answer any one question : 8 × 1**

9. Describe the consequences of e-waste on the environment and human health.
10. What do you understand by the e-waste (Management and Handling) rules 2011 ? Describe the policy level initiatives are taken in India to handle e-waste. 2 + 6

**[ Internal Assessment – 5 Marks ]**

**UNIT-II : C-ELC – 204B**

*( Renewable Energy )*

**GROUP – A**

**Answer any two questions : 2 × 2**

11. Discuss how green-house gases protect us on earth ?
12. What do you mean by green foot-print ?

13. What is energy trilemma Index ?

14. What do you mean by GHP ?

**GROUP – B**

Answer any two questions : 4 × 2

15. What is pyrolysis oil ? Discuss different types of geothermal power plants. 1 + 3

16. What do you mean by net-metering ? What is solar thermal electricity ? 2 + 2

17. What do you mean by clean energy and green energy ? What is renewable and non-renewable energy ? 2 + 2

18. Discuss the power and functions of National Green Tribunal.

( 5 )

**GROUP – C**

**Answer any one question : 8 × 1**

**19. Discuss how environmental degradation takes place due to production and utilization of energy ? Discuss the 10% energy law. With a neat sketch explain the energy flow diagram on earth. 2 + 2 + 4**

**20. What is a tidal power plant and what factors are considered in order to install it ? What are the different factors which affect the size of the bio-gas plant ? Describe various advantages and disadvantages of geo-thermal energy. 2 + 2 + 2 + 2**

**[ Internal Assessment – 5 Marks ]**

