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**Question Paper Code : 70420**

B.E. / B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2023.

Sixth / Seventh / Eighth Semester

Computer Science and Engineering

CS 8078 – GREEN COMPUTING

(Common to : Computer and Communication Engineering / Information Technology)

(Regulations 2017)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — ( $10 \times 2 = 20$  marks)

1. Define Green IT.
2. In what ways IT is inseparable from business?
3. List four major green assets.
4. What is environment Intelligence?
5. Why are green data centers needed?
6. Define Virtualization.
7. What is the Green Enterprise Transformation (GET)?
8. List any four items in green audit check list.
9. What is meant by ERBS?
10. Name any two applications where Green IT strategies are applied.

PART B — ( $5 \times 13 = 65$  marks)

11. (a) Write short notes on:

- (i) Carbon footprint. (7)
- (ii) Dimensions of Green IT strategies. (6)

Or

- (b) Write short notes on:

- (i) Scoop on power. (6)
- (ii) Practices and metrics of environmentally responsible business. (7)

12. (a) Discuss upon the facts related to various green assets that contribute to the process of green computing.

Or

- (b) Discuss in detail the objectives to be met during design and development of Green Information System.
13. (a) Illustrate how telecommuting and virtualization of IT systems serve a solution for green computing initiatives.

Or

- (b) Demonstrate the Green Grid Framework formation using Green Data Center.
14. (a) Brief on green compliance and discuss in detail the protocols and standards governing green compliance.

Or

- (b) Write short notes on:
- (i) Socio-cultural aspects of Green IT. (6)
- (ii) Green enterprise transformation. (7)
15. (a) Highlight the environmental challenges and understanding of the contribution of computing the environmental strategies of a business and its sustainable management with an appropriate case study.

Or

- (b) Elaborate on the process of applying green IT strategies to a hospital particularly during the existence of pandemic.

PART C — (1 × 15 = 15 marks)

16. (a) Analyze the role of emotional intelligence and provide certain tools and techniques in examining relationships between seasonal environmental changes and infectious diseases.

Or

- (b) An organization AXX plans to take up a BPO wherein it is supposed to provide technical support for an international bank, Analyze upon the ways of implementing Green Information system for the new venture.