

20 APR 2023

Reg. No.

Question Paper Code

11784

**B.E. / B.Tech. - DEGREE EXAMINATIONS, APR/MAY 2023**

Eighth Semester

**Computer Science and Engineering**

(Common to Information Technology)

**CS8078 – GREEN COMPUTING**

(Regulations 2017)

Duration: 3 Hours

Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**

Answer ALL Questions

- |   | <i>Marks,<br/>K-Level, CO</i> |
|---|-------------------------------|
| 1. What is Green Computing?   | 2,K1,CO1                      |
| 2. What is ERBS?  | 2,K1,CO1                      |
| 3. How data server optimization can be improved?                    | 2,K2,CO2                      |
| 4. List the three activities of Green Asset.                        | 2,K2,CO2                      |
| 5. Define Green Re-engineering.                                     | 2,K1,CO3                      |
| 6. What are the various categories of green business processes?     | 2,K1,CO3                      |
| 7. How to reduce energy consumption?                                | 2,K1,CO4                      |
| 8. List some of the advantages of using Storage Virtualization.     | 2,K2,CO4                      |
| 9. Describe the specific advantages in undertaking Green IT audits. | 2,K2,CO5                      |
| 10. List out the three main categories of green-collar workers.     | 2,K2,CO5                      |

**PART - B (5 × 13 = 65 Marks)**

Answer ALL Questions

11. a) Show about Green Enterprise Architecture with an example that encompasses the business, technology, people and process dimensions of an organization. 13,K2,CO1
- OR
- b) List the various Green Policies that are implemented through practices and proved through metrics. 13,K2,CO1
12. a) Discuss the factors that need to be considered during achieving Green BPM. 13,K3,CO2
- OR
- b) Illustrate in detail about the Green Process categories and their carbon impact. 13,K3,CO2

*K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create*

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13. a) Discuss about the subsystems involved in GIS and also briefly explain GIS requirements. 13,K3,CO3
- OR
- b) Illustrate how the re-engineering of the processes of a digital library happens in the real world. 13,K3,CO3
14. a) Analyze in detail about E-waste management and recycling. 13,K4,CO4
- OR
- b) Apply the virtualization management with related examples. 13,K4,CO4
15. a) Justify the Green Compliance: Protocols, Standards, and Audits in detail. 13,K4,CO5
- OR
- b) Analyze the various Socio-cultural aspects of Green IT with examples in brief. 13,K4,CO5

**PART - C (1 × 15 = 15 Marks)**

16. a) Illustrate the two crucial reasons why a business likes yours should adopt environmentally responsible business strategies. How do you believe emerging technologies (such as mobile, Web x.0, Cloud computing) should be incorporated in business to help to reduce the carbon footprint? 15,K3,CO6
- OR
- b) Develop the SWOT of Good Mead hospital, strategic concerns of management and lessons learnt in implementing Green IT strategies. 15,K3,CO6