Course code: 18IS7DEGCT   **Course Title: Green Computing**

Module wise Question Bank
Module 1: Green IT Fundamentals (each question carries 8 to 10 marks)
1.what is green IT? Explain how green IT influences business, society and environment, show them with sustainable triangle format. 43 , 41
2.List and explain the specific ways in which green IT is beneficial to the organization. 45
3.How does IT relate to business? what is the impact of this close relationship between IT and business on the environment . 47
 4.Explain the green enterprise characteristics with a neat supporting diagram 52
5.Write short notes on:
 a. Green vision   b. Green IT opportunities 54 , 56
6.List and explain the challenges of green IT 61, 76
7.Explain the philosophical considerations in green IT strategy   76
8.List and explain the elements of ERBS of green IT   85
9.Explain how costs and profit margins play a role in driving an organization towards ERBS?(fig 2.7 in text book)   90
10.Explain green IT metrics and measurements 140
11.Explain the steps involved in development of ERBS 101
12. what are the polices and practices in ERBS   118

Module 2: Green Assets: Buildings, Data Centers, Networks, and Devices(each question carries 8 to 10 marks)

1.What is the impact of the data center aspect of green IT strategies on carbon reduction? 167

2.What is virtualization? what are the advantages and risks associated with virtualization? 175

3.List with examples the factors influencing green data centers. How can cloud computing help reduce carbon emissions? 131 , 178

4.Describe the various assets of an organization from their carbon generation perspective . 162

5.What are the polices and practices of green POD in the context of device and peripherals ? 161

6.What is green business process management? discuss the roles of green BPM in reduction of an organizational carbon footprint. 193

7.what are the characteristics of the process and how do they apply to a green process? 192

8.Explain the concept of green process reengineering with an example. 194

9.list and explain the factors which affects achieving the green business process management 210

Module 3: Green Enterprise Architecture (each question carries 8 to 10 marks)

1.Explain the various types of green architectures within the enterprise, such as information architecture and solutions architecture 226

2.Explain the role of supply chain management systems in the green enterprise architecture. 239

3.List and explain the phases of green information systems 257

4.Describe the features of green information system 258

5.List the importance of green enterprise architecture in an organization and write the sequence diagram for emissions check. 277

6.Create a use case diagram from major aspects of green information systems relevant to your working organization

7.Write the use case diagram of a green organizational portal of any enterprise organization. 265

Module 4: Socio-cultural aspects of Green IT (each question carries 8 to 10 marks)

1.Why is green IT subjective? What can be done to convert the subjective? 285

2.What are the various role based views of green IT in an organization? how does the view of a decision maker differ from that of an IT consultant ? 290

3.What are the two different aspects of green enterprise frameworks? 313

4.what is the importance of equipment lifecycle as compared with data center efficiencies? 321

5.describe the four dimensions of green enterprise transformation along with its supporting diagram. 315

6.write a short notes on :a) Green ICT framework 320   b)Green transformation process 329

7.Discuss the ways in which standards in environmental management can be enhanced 391

8.what is collaborative environmental intelligence ?Discuss two ways in which collaborative EI can be applied in todays organizations to reduce carbon footprint. 395

MODULE 5: The Environmentally Responsible Business Strategies (ERBS) and case studies(each question carries 8 to 10 marks)

1. Explain How green IT strategies applied to applications of Hospital 402
2. Explain How green IT strategies applied to applications of Packaging industry 418
3. Explain How green IT strategies applied to applications of Telecom sector 432
4. Explain How green IT strategies applied to applications of home automation NA
5. Explain Swot of Zeetel with respect to environmental context 437

6. Explain the steps involved in developing a hospitals ERBS 409