(3 hours)   Total Marks: 80

N.B.   (1) Question no. **1** is **compulsory**.
      (2) Attempt any **three** out of remaining **four** questions.
      (3) **Figures** to the **right** indicate **full** marks.

Q.1 Attempt any **Four** out of **Five** questions

    a. What is green IT? Explain with green IT dimensions.   5
    b. What is sustainable software? Explain attributes of software sustainability.   5
    c. What are the various energy management techniques for hard disk?   5
    d. What is Life Cycle Assessment? Explain 4 stages of LCA.   5
    e. Explain SITS value curve in SITS strategic framework.   5

Q.2   a. Explain life cycle of a device or hardware in detail.   10
      b. What are the key elements of data centre IT infrastructure?   10

Q.3   a. Explain sustainable software methodologies.   10
      b. What are the various energy saving software techniques?   10

Q.4   a. What are the various business drivers for green IT strategies?   10
      b. Explain sustainable IT roadmap.   10

Q5.   a. What is strategic thinking, planning and implementation for green initiatives?   10
      b. Explain objectives of green networking.   10

Q.6 Write a short note on (**any four**)

    a. Strategies to reduce carbon emission suggested by BSR   5
    b. Three R's of Green IT   5
    c. Sustainability Hierarchy models   5
    d. Regulatory environment for green IT   5
    e. Data centers and associated energy challenges   5

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