SEAT No. :

P3147

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[5154]-710-C

B.E. (Information Technology)
GREEN IT - PRINCIPLES AND PRACTICES
(2012 Pattern) (Semester -II) (Elective-IV) (End Sem.) (414464C)

Time : 2½Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1) Answers Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.
2) Neat diagrams must be drawn wherever necessary.
3) Figures to the right side indicate full marks.
4) Assume suitable data, if necessary.

Q1) a) What are P and C states of processor? How does processor C-states save energy? **[7]**

    b) How do you infer the term Green IT? Explain the Green IT framework. **[7]**

OR

Q2) a) How can an organization use software sustainability for competitive advantage? **[7]**

    b) How the term 'sustainability' differs from 'green'? Explain sustainable software development methodology. **[7]**

Q3) a) How would you maintain energy efficiency of data center facility. **[7]**

    b) What are the different power states of a hard disk? **[7]**

OR

Q4) a) Describe the key challenges in managing data center operations. **[7]**

    b) Explain the objectives of green network protocols. **[7]**

Q5) a) List and infer the business dimensions for green IT strategy implementation. **[7]**

    b) Explain the hierarchy of sustainability models. What is the role of sustainability frameworks, principles, and tools? **[7]**

OR

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Q6) a) How would you prioritize the considerations in creation of green IT strategy. **[7]**

b) What are the key metrics for data center energy efficiency? **[7]**

Q7) a) How an organization should develop its strategy to transform itself into high-value SITS based organization? **[7]**

b) What are the major categories of information systems within an organization? Provide examples of greening enterprise activities at each level. **[7]**

OR

Q8) a) What factors will motivate an organization to green their IT activities in absence of any external pressure. **[7]**

b) Identify and discuss the four major ways in which organizations can gain value by greening an enterprise. **[7]**

Q9) a) How an organization can formulate, implement and manage its green practices. **[7]**

b) What are the enabling effects of green IT-based software application. **[7]**

OR

*Q10)*a) Distinguish between the direct effects of green IT and the enabling effects of green IT-based applications. **[7]**

b) What is green washing? Do you think companies engage in it? **[7]**

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