Total No. of Questions : 10]

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SEAT No. :

[**Total No. of Pages : 2**

[4959]-1143

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

Time : 2½ Hours]
Instructions to the candidates:

[Max. Marks : 70

1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.*
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) How software's impact the environment and the energy consumption of computing systems? **[7]**

b) How server farm and server virtualization helps in saving energy. **[7]**

OR

Q2) a) What are P and C states of processor? How does processor C-states save energy? **[7]**

b) What are the quality attributes used for developing sustainable software. **[7]**

Q3) a) How energy-efficient networking is related to objectives of Green IT. **[6]**

b) What are sustainable information technology systems (SITS)? How SITS can help in improving and leveraging environmental sustainability. **[8]**

OR

Q4) a) Why energy-efficient networking important in light of the increased number of renewable power plants? **[6]**

b) How Green IT strategies adopted by an organization evolve over time. **[8]**

P.T.O.

Q5) a) Explain sustainability from perspective of multilevel information problem.
                                                                    [7]

b) How green IT strategy is developed by an organization.   **[7]**

OR

Q6) a) Explain the source of greenhouse gas emissions within the organizations.
                                                                    [7]

b) Discuss the organizational considerations in formulating enterprise green IT strategy.   **[7]**

Q7) a) What are the sustainability dimensions of information technology.   **[7]**

b) What is enterprise resource planning (ERP) system? Explain an architecture of typical ERP system with respect to functional activities of an organization.   **[7]**

OR

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

b) Which key technologies are to be considered for developing sustainable IT strategic plan?   **[7]**

Q9) a) What are the steps involved in risk assessment of an information system.   **[7]**

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

OR

*Q10)*a) How an organization can formulate, implement and manage its green practices.   **[7]**

b) What is enterprise architecture planning and how it is different from strategic planning.   **[7]**

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