

**SUBJECT CODE NO:- P-335**  
**FACULTY OF ENGINEERING AND TECHNOLOGY**  
**B.E. (CSE/IT) Examination May/June 2017**  
**Green IT (CSE/IT) [Elective-II]**  
**(Revised)**

**[Time: Three Hours]****[Max.Marks:80]**

Please check whether you have got the right question paper.

- N.B
- i) Q.1& Q. 6 are compulsory.
  - ii) Solve any two questions from Q.2 to Q.5 for section A & any two questions from Q.7 to Q.10 sections B.
  - iii) Draw appropriate diagrams wherever necessary.

**Section A**

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|-----|---|----|
| Q.1 | a) Explain the following terms:-<br>i) Active software ii) Idle software.   | 04 |
|     | b) Explain the various environmental impacts of IT.   | 06 |
| Q.2 | a) Explain how the following hazardous chemicals used in manufacturing of a electronic device have effect on humans:-<br>i) Lead ii) Cadmium iii) Mercury iv) Arsenic | 08 |
|     | b) Explain the various strategies to reduce the power consumption by desktop computers.   | 07 |
| Q.3 | a) Write a note on Green House Gas Emissions.   | 07 |
|     | b) Explain how computer's entire life cycle can be greened.   | 08 |
| Q.4 | a) Write a note on following power tools.<br>1) Power Informer 2) Energy Checker  | 07 |
|     | b) Explain how usability attribute can be used to asses sustainability of software.   | 08 |
| Q.5 | a) Explain how server Design & Server systems. Development support Green Data center.   | 07 |
|     | b) Write note on following energy Management techniques for Hard disks.<br>1) State Transitioning 2) Caching  | 08 |

**Section B**

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|------|--|----|
| Q.6  | a) Explain the various strategies suggested by business for social Responsibility (BSR), 2009 to reduce carbon emissions at all stages of business life cycle.             | 04 |
|      | b) Indentify & discuss the four major ways in which organizations can gain value by greening an enterprise.  | 06 |
| Q.7  | a) Explain the benefits of Energy efficient Networks.  | 07 |
|      | b) Explain the Green cloud architecture in brief.  | 08 |
| Q.8  | a) Explain the following features of clouds enabling green computing:<br>1) Dynamic Provisioning<br>2) Multi-tenancy<br>3) Server utilization<br>4) Data centre efficiency | 08 |
|      | b) Explain the five green & profit oriented policies employed for scheduling by Green Broker.  | 07 |
| Q.9  | a) Write a note on Green supply chain & Logistics management.  | 07 |
|      | b) What are the major elements of the value chain, and how does 'closing the Loop' relate to value chain?  | 08 |
| Q.10 | a) Write note on E-commerce & Greening the extended Enterprise.  | 08 |
|      | b) Explain in brief the concept of Smart Grid.   | 07 |

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