

**SUBJECT CODE NO:- P-435**  
**FACULTY OF ENGINEERING AND TECHNOLOGY**  
**B.E. (CSE/IT) Examination MAY/JUNE-2016**  
**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
- 1) Q.1 & Q.6 are compulsory.
  - 2) Solve any two questions from Q.2 to Q.5 for section A & From Q.7 to Q.10 for section B.
  - 3) Draw appropriate diagram wherever necessary.

**Section A**

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|-----|---|----------|
| Q.1 | a) Explain the importance of EPEAT in brief.<br>b) Explain in brief the terminologies. <ol style="list-style-type: none"> <li>i) Greenhouse gas</li> <li>ii) Green software</li> </ol>  | 06<br>04 |
| Q.2 | a) Explain in brief the following <ol style="list-style-type: none"> <li>i) Green IT dimensions.</li> <li>ii) OCED green IT framework.</li> </ol> b) Define green IT. Describe the 3 R's of Green IT.   | 08<br>07 |
| Q.3 | a) Explain the strategies for reduced energy consumption during the working of the following components of a computer: <ol style="list-style-type: none"> <li>i) Processor</li> <li>ii) Hard disk</li> <li>iii) Peripheral devices</li> </ol> b) Explain in brief the usage of following power modes in reducing power consumption in Laptops or Desktop PCs. <ol style="list-style-type: none"> <li>i) Standby</li> <li>ii) Hibernate</li> </ol> | 08<br>07 |
| Q.4 | a) Explain in brief following <ol style="list-style-type: none"> <li>i) Well behaved software</li> <li>ii) Idle software</li> <li>iii) Vectorization</li> </ol> b) Explain in brief the following power tools. <ol style="list-style-type: none"> <li>i) Windows 7 power cfg</li> <li>ii) Power informer</li> </ol>   | 08<br>07 |
| Q.5 | a) Mention & explain in brief the quality attributes for sustainability performance.<br>b) Explain the following terminologies: <ol style="list-style-type: none"> <li>i) Instability</li> <li>ii) Abstactness</li> <li>iii) Distance from main sequence.</li> </ol>  | 08<br>07 |

## Section B

Q.6	a) Mention the objectives of networking protocol.	04
	b) Explain the terms in brief:	06
	i) Public clouds	
	ii) Private clouds	
	iii) Hybrid clouds	
Q.7	a) Explain the contributions made by various standardization bodies in networking.	07
	b) Explain how the drive for reduced carbon cost & improved operational sustainability relate to energy efficient networks.	08
Q.8	a) Explain	07
	i) Demanufacturing	
	ii) Reverse logistics	
	b) Explain the following categories of enablers of Green-IT:	08
	i) Strategy definition	
	ii) Organizational support	
	iii) Motivation	
	iv) Traceability	
Q.9	a) Explain the characteristics of cloud computing	07
	b) Explain how data centers can be made power efficient.	08
Q.10	a) Explain the concept of green engineering w.r.t. designing & processing any product.	08
	b) Define sustainable enterprise. Mention & explain the general guidelines for making enterprises' functional units green.	07