

SUBJECT CODE 169
FACULTY OF ENGINEERING AND TECHNOLOGY
B.E. (CSE/IT) Examination Nov/Dec 2015
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.No.1 and Q.No.6 are compulsory.
- ii) Solve any two questions from Q.2 to Q.5 for section A & from Q.7 to Q.10 for section B.
- iii) Draw appropriate diagrams wherever necessary

SECTION- A

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|-----|---|----|
| Q.1 | a) Explain how packaging & transportation contribute to carbon foot print. How can the carbon footprint be reduced in this regard | 06 |
| | b) Explain: i) green washing ii) green data storage | 04 |
| Q.2 | a) Explain in brief: i) holistic approach to greening IT ii) greening computers life cycle. | 08 |
| | b) Define green IT. Describe the 3Rs of green IT | 07 |
| Q.3 | a) Outline the different stages in the life cycle of an electronic device. Explain how greening effect can be added in every stage to produce a green device. | 08 |
| | b) Explain i) efficient algorithms ii) active software w.r.t green IT iii) multithreading | 07 |
| Q.4 | a) Explain the strategies that help in optimizing power consumption during the usage of laptops & desktop PCs. | 08 |
| | b) Define context awareness. Give few examples to illustrate how context leads to ‘smarter’ devices. | 07 |
| Q.5 | a) Define sustainable software. Explain the sustainable software methodology | 08 |
| | b) Explain in brief the following software sustainability metrics | 07 |
| | i) Modifiability reusability | |
| | ii) Portability | |

SECTION-B

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|------|---|----|
| Q.6 | a) Explain the following categories of enablers for green IT: i) strategy definition ii) organizational support | 04 |
| | b) Explain how RFID technology can contribute in environmental sustainability | 06 |
| Q.7 | a) Explain the objectives of green networking along with its core components | 07 |
| | b) What are the contributions of “work in progress” internet drafts by EMAN working group | 08 |
| Q.8 | a) Explain: i) Eco- industrial parks ii) Reverse logistics | 07 |
| | b) What are the major categories of information systems within an organization? Mention the greening enterprise activities carried at each level. | 08 |
| Q.9 | a) Explain the components of cloud computing in brief. | 08 |
| | b) Explain the various features of green cloud computing | 07 |
| Q.10 | a) Explain how the seven –step approach will help enterprises to develop & implement an enterprise green strategy. | 08 |
| | b) Explain the various green IT trends used in companies to minimize environmental footprint | 07 |

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