

**FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA**  
**SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY**  
**DEPARTMENT OF INFORMATION AND MEDIA TECHNOLOGY**  
**FIRST SEMESTER 2017/2018 SESSION**  
**IMT411-GREEN IT**  
**INSTRUCTION: ANSWER ALL THE QUESTION.**  
**TIME ALLOW: 2 HOURS**

- 1(a) Explain the concept of Green IT? **(3 marks)**  
(b) Highlight FOUR (4) reasons why Green IT is relevance and importance in the 21<sup>st</sup> century **(6 marks)**  
(c) "In some quarter, Information Technology (IT) is more of curse than blessing". With reference to at least FOUR (4) examples, discuss the extent to which you agree or disagree with this statement. **(4 marks)**
- 2(a) With the aid of clear diagram, discuss the 3Rs of Green IT **(6 marks)**  
(b) Although refurbishing and recycling are effective techniques for the end-of-life management of any electronic devices, more often than not, they are not practical. The only option left at this stage would be disposal. Discuss the benefits and potential problems that might arise as a result of this last option **(6 marks)**  
(c) A major means of IT devices sustainability is to increase the lifespan of the device by enabling easy upgrade of its various parts. Itemize some design considerations that allows easy upgrade of any IT and its components **(3 marks)**
- 3(a) Computational efficiency means getting the workload done quickly, with minimal energy consumption. Vividly discuss some programming approaches that computer scientists have invented to achieve computational efficiency **(6 marks)**  
(b) Every IT device runs software, and every one of them requires energy to do it, therefore platform's energy efficiency is extremely important. Explain the relevance of C-States and P-States of processor in terms of energy efficiency **(2 marks)**
- 4(a) Businesses needs compelling reasons to undertake and implement green IT strategies. Discuss any FOUR (4) of the compelling reasons for businesses to implement green IT strategy? Support it with relevant real-world instances **(8 marks)**  
(b) An organization changes or transforms along four different dimensions. Briefly discuss each of these dimensions **(4 marks)**
- 5(a) Green IS and Green IT are important and interrelated concepts. Differentiate between the two concepts **(2 marks)**  
(b) With the aid of appropriate examples, define EACH of the following organizational IS-related concepts and discuss its use within Information Systems in Greening Enterprises
- I. TPS  
II. DSS  
III. ESS  
IV. MIS  
V. EMIS **(10 marks)**

**GOOD LUCK!!!**