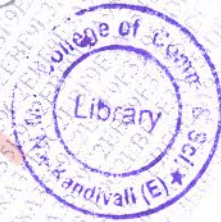


Please check whether you have got the right question paper.

N.B:

- 1) All questions are compulsory.
- 2) Figures to the right indicate marks.
- 3) Draw suitable diagrams and illustrations wherever necessary.
- 4) Mixing of sub-questions is not allowed.



Q.1 Attempt All the Questions

5M

A. Choose the correct alternative

- i. The Three R of Green IT are _____, _____, and _____.
 - a) reuse, return, recycle
 - b) reuse, refurbish, recycle
 - c) return, refurbish, recycle
 - d) record, recover, recycle
- ii. SITS refers to _____.
 - a) Stable IT services
 - b) Suitable IT services
 - c) Sustainable IT services
 - d) Sustainable information services
- iii. KPI refers to _____.
 - a) Key performance indicators
 - b) Key path Indicators
 - c) Key performance Index
 - d) Key performance instruments
- iv. Random access causes _____ head movements than sequential accesses, and thus leads to higher head power consumption.
 - a) less
 - b) equal
 - c) no
 - d) more
- v. NAS stand for _____.
 - a) Network-access score
 - b) Network-attached storage
 - c) Network-active storage
 - d) Network-attached service

B. Fill in the blanks (Choose one from the pool)

{C-states, stable state, P-states, Green IT Policy, environmentally, standby, emergency, running, solid state} 5M

- i. _____ (also called sleep states) are core power states that define the degree to which the processor is 'sleeping'.
- ii. ERBS stand for _____ responsible business strategy.
- iii. _____ encompasses the frameworks the organization puts in place to apply environmental criteria in IT-related activities
- iv. Hard drives are in one of the following states – Active, _____ idle or Sleep.
- v. SSD means _____ drive.

C Explain the following in one for two lines

- i. Green enterprise
- ii. G-readiness
- iii. Role of virtualization in energy management.
- iv. Green IT metrics
- v. Green washing

5M

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Q.P. Code :05346

- Q.2 Attempt the following: (Any THREE) 15M**
- A. Write a note on Environmental impacts of IT.
 - B. Write a note on software Energy Efficiency Techniques.
 - C. Write a note on Sustainable Software Methodology.
 - D. Explain how software can negatively impact the environment?
 - E. What are Energy Metrics? List them.
 - F. Explain the holistic approach to green IT.
- Q.3 Attempt the following: (Any THREE) 15M**
- A. What are green data centre? Explain
 - B. Write a note on business drivers of Green IT strategy.
 - C. Briefly describe the Organizational Sustainability dimensions.
 - D. Outline key sustainability challenges associated with data centres.
 - E. What are the challenges in implementing green IT strategies?
 - F. Explain how storage systems' energy consumption could be managed effectively at the system level.
- Q.4 Attempt the following: (Any THREE) 15M**
- A. What a note on Hierarchy of Sustainability Models.
 - B. How do you ensure organisations G- readiness?
 - C. List and explain the SICT capability building blocks.
 - D. What are the various issues faced in greening the inter-organizational enterprise activities?
 - E. Explain the 4 business dimensions for greening enterprise.
 - F. Discuss the factors that drive the development of sustainable IT.
- Q.5 Attempt the following: (Any THREE) 15M**
- A. List methods to reduce energy consumption during software development.
 - B. Highlight the impact of 'electronic devices' on the environment during each phase of their life cycle, and possible causes for this impact.
 - C. Highlights different energy management techniques for hard disks.
 - D. Write a note on Multilevel Sustainable Information.
 - E. Write a note on Green IT standards.