ATKT Exam Oct-17
Sem-II
G-T

FYCS
12/10/17

Q.P. Code :05346

(19)

[Time: 2:30 Hours] **[Marks:75]**

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
b) Sustainable IT services c) 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 the 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 **5M**

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

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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.
