

G5 (ques 11 / Green computing (32

Q.P. Code :05344

[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

A) Choose the correct alternative

5M

- \_\_\_\_\_ is integration of computer resources from various locations to form a common virtual platform.
  - a) Grid Computing
  - b) Distributed Computing
  - c) Cloud Computing
  - d) None of the Above
- DAS is
  - a) Direct Area Storage
  - b) Direct Access Storage
  - c) Direct Attached Storage
  - d) Direct Access Service
- \_\_\_\_\_ is an international standard that marks the energy efficiency electronic products.
  - a) LEED
  - b) Energy Star
  - c) WEEE
  - d) EPEAT
- SSD's consume \_\_\_\_\_ energy then HDD's.
  - a) Less
  - b) equal
  - c) no
  - d) more
- \_\_\_\_\_ focuses on the needs and requirements of upper management and help them on strategic management of organizations.
  - a) Executive Support system
  - b) Decision Support System
  - c) Management Information System
  - d) Transaction Support System

B) Fill in the Blanks ( Choose one from the pool)

5M

- {e-waste, CO, data server, server farm, P0, context awareness,C6}
- A server cluster is also known as \_\_\_\_\_
  - \_\_\_\_\_ is any unwanted or damaged electronic component.
  - \_\_\_\_\_ is developing application software that adapt to changes in the environment.
  - The \_\_\_\_\_ state indicate 100% CPU use.
  - \_\_\_\_\_ is a central repository for data storage and management.

C) Explain the following in one or two lines

5M

- i. Green Washing
- ii. Public Cloud
- iii. PUE
- iv. Types of RAID
- v. SICT



**Q.2 Attempt the following: ( Any THREE)**

15M

- A. Explain the various environmental impacts of IT.
- B. Write a short note on green washing.
- C. Discuss the software tools used to create energy efficient applications.
- D. Explain the life cycle of a device.
- E. What are the 3 R's of green IT?
- F. Write a short note on sustainable software.

**Q.3 Attempt the following: ( Any THREE)**

15M

- A. Explain the various green data center metrics.
- B. Write a short note on Green Network protocol.
- C. Discuss in short the business drivers of green IT.
- D. What energy efficiency technologies should be used to reduce running cost in data center?
- E. Describe the organizational considerations in Green IT Strategy.
- F. Write a short note on Storage Area Networks.

**Q.4 Attempt the following: ( Any THREE)**

15M

- A. Discuss the different levels of information flow
- B. Explain the various stages of Life Cycle Assessment.
- C. Write a note on G-Readiness Framework.
- D. List and explain the 4 business dimensions for greening enterprise.
- E. Discuss Organizational Level Information?
- F. Write a note on SITS.

**Q.5 Attempt the following:(Any THREE)**

15M

- A. List and explain energy saving software techniques.
- B. Discuss the impact of 'electronic devices' on the environment during each phase of their life cycle.
- C. What are the steps involved in developing a green IT strategy?
- D. What are the various issues faced in greening the inter-organizational enterprise activities?
- E. Write a note on Green IT Standards.