

(2½ Hours)

[Total Marks: 75]

- N.B. 1) All questions are compulsory.  
2) Figures to the right indicate marks.  
3) Illustrations, in-depth answers and diagrams will be appreciated.  
4) Mixing of sub-questions is not allowed.

**Q. 1 Attempt the following**

**(a) Select the correct alternative**

(5M)

- (i) \_\_\_\_\_ is one of the gas in GHG  
a) Carbondioxide  
b) Nitrogen  
c) Oxygen  
d) none
- (ii) It measures the ability of system to work on various platform  
a) Supportability  
b) Dependability  
c) Portability  
d) Efficiency
- (iii) Server which contains machine with power and network cabling for each unit  
a) Blade server  
b) Rack server  
c) Both a and b  
d) None
- (iv) \_\_\_\_\_ copies files based on their temporal locality to other disks and cannot be applied to online storage.  
a) MAID  
b) Green Store  
c) RAID  
d) PDC
- (v) Reuse, recycle, \_\_\_\_\_ and Earth charter are well known Sustainability Principles.  
a) Refurbish  
b) Regenerate  
c) Reduce  
d) None

**(b) Fill in the blanks**

(5M)

(Triple Bottom Line, Rescrap, Refurbish, Dependability, Efficiency, Table base Language, Goods-Dominant Logic, Service-Dominant Logic.)

- (i) The 3 Rs of green IT are Reuse, Recycle and \_\_\_\_\_.
- (ii) \_\_\_\_\_ is one of the usage related attributes.
- (iii) TBL stands for \_\_\_\_\_.
- (iv) \_\_\_\_\_ uses value in use concept.
- (v) \_\_\_\_\_ is one of the process related attributes.

**(c) Answer the following in one or two lines:**

(5M)

- (i) Define Green IT.
- (ii) List techniques used in data efficiency.
- (iii) What do you mean by SAN.
- (iv) What are different levels of information flow
- (v) What is SICT?

(15M)

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

- (a) Explain with the help of diagram 3 R's of Green IT.
- (b) Explain in details Impacts of IT on environment.
- (c) Define attributes. List and explain different sustainable software attributes.
- (d) What is context awareness. How can it help to save energy.
- (e) What are the e-ways of disposal technique
- (f) List and explain the various green IT devices

(15M)

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

- (a) Explain the concepts of: server farm, cloud computing.
- (b) Explain the various components of IT Infrastructure.
- (c) Explain the various energy management techniques for hard disk.
- (d) Write a short note on Business Drivers of green IT strategies.
- (e) Explain any two System Level Management.
- (f) What are the various organizational considerations in a green IT strategy.

(15M)

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

- (a) Write a short note on Organizational Level Information
- (b) Explain the various sustainability hierarchy models.
- (c) Distinguish between green IT and SITS.
- (d) What are the various inter-organizational enterprise activities? Explain them
- (e) Write a short note on LCA.
- (f) What is SITS strategic framework.

(15M)

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

- (a) Write a short note on green washing.
- (b) Explain the various processor power states.
- (c) What is green network protocol and its objectives.
- (d) What is green readiness. Explain.
- (e) Write a short note on NAS, SAN, DAS.