

**Sample Questions** (30 MCQs and 30 Descriptive Questions)

Department of Information Technology (**R-2019 Scheme**)

**Subject Name: Green IT**

**Semester: VI**

Multiple Choice Question Bank

<b>Q1.</b>	<b>Choose the correct option for following questions. All the Questions are compulsory and carry equal marks</b>
1.	what are the three 'Rs' of green IT: Reuse,Recycle and
Option A:	Reduction
Option B:	Redeploy
Option C:	Reduce
Option D:	Refurbish
2.	Role of ISO 14048 standard is _____ .
Option A:	Life cycle assessment. Principles and framework
Option B:	Life cycle assessment. Goal and scope definition and inventory analysis
Option C:	Life cycle assessment. Data documentation format
Option D:	Life cycle assessment. Life cycle interpretation
3.	What is green data centre?
Option A:	It is a server facility which utilizes energy-efficient technologies
Option B:	It is a cloud based facility centre
Option C:	It cloud base mining warehouse
Option D:	It provides data on virtual platform
4.	which is not a part of sustainability metrics
Option A:	Collect metrics
Option B:	Analyze results
Option C:	Define action
Option D:	Sustainable performance
5.	What is the last stage of SITS curve?
Option A:	Sustainable product design
Option B:	Legal, compliance, standards and risk management
Option C:	Sustainable processes
Option D:	SITS innovation platform
6.	what are the two characteristics of risks
Option A:	Plan and analysis
Option B:	Track and plan
Option C:	uncertainty and loss
Option D:	loss and plan
7.	Main factors of SITS value curve graph are ____ & _____.
Option A:	service value, time
Option B:	Product value,time

Option C:	Total value,time
Option D:	Energy, time
8.	What is core feature of sustainability reporting ?
Option A:	Triple bottom line
Option B:	Employee Performance
Option C:	Motivation
Option D:	Strategy definition
9.	Reduce energy consumption by 10% of its current level per year for three years"" this statement can be taken as Key Performance Indicator for measuring the green strategies implemented by the company"
Option A:	Economic outcome
Option B:	Technical
Option C:	Process
Option D:	People
10.	The "Natural Step" sustainability framework defines four system conditions, derived from the _____, for a sustainable society
Option A:	Laws of Motion
Option B:	Laws of Thermodynamics
Option C:	Law of Gas particle
Option D:	Laws of Cooling
11.	Which of the following is not a stage of Life-Cycle Assessment?
Option A:	Goal and scope definition
Option B:	Inventory analysis
Option C:	Return on Investment Analysis
Option D:	Impact assessment
12.	Which one of the following is not a software process quality
Option A:	Productivity
Option B:	Portability
Option C:	Timeliness
Option D:	Visibility
13.	Optimizing the protocols in their design through removal of support for _____ versions.
Option A:	Newer
Option B:	older
Option C:	changed
Option D:	updated
14.	ICMPv6, there may be an opportunity to reduce the amount of _____ associated with the protocol
Option A:	Accuracy
Option B:	performance
Option C:	redundancy

Option D:	reliability
15.	Primary contributions in the IEEE Standard _____ az include a low-power state for activation during idle periods and times of low utilization.
Option A:	802.11
Option B:	802.3
Option C:	805.5
Option D:	808.8
16.	In UDP there is _____ of overhead in UDP packets prior to the encapsulation of application data.
Option A:	16 bits
Option B:	32 bits
Option C:	64 bits
Option D:	132 bits
17.	According to Energy Star, data centers can reduce energy costs by what percentage for every 1°F increase in server inlet temperature _____ .
Option A:	Upto 1%
Option B:	Upto 2%
Option C:	Upto 5%
Option D:	Upto 15%
18.	What provides the fundamental virtual machine upon a server can be built?
Option A:	Infrastructure as a service
Option B:	Software as a service
Option C:	Power system
Option D:	Service-oriented architecture
19.	DCIM stands for?
Option A:	Data centre infrastructure management
Option B:	Data centre information management
Option C:	Data cooling infrastructure management
Option D:	Data centre information management
20.	What is server management?
Option A:	Server management is the process of monitoring and maintaining servers to operate at peak performance
Option B:	Ensure server hardware performance
Option C:	Verify that the task has been configured to run in unattended mode
Option D:	Make sure the time is properly synchronized on the computer
21.	what CRAC stands in for cooling IT servers?
Option A:	Computer room air conditioner
Option B:	Computer room air control
Option C:	Computer rated air controller
Option D:	Control room automated control

22.	what is server farm?
Option A:	A collection of computer servers
Option B:	A collection of processor
Option C:	A collection of memories
Option D:	A collection of grid
23.	which is not a part of sustainability metrics
Option A:	Collect metrics
Option B:	Analyze results
Option C:	Define action
Option D:	Sustainable performance
24.	what describes a distribution model in which applications are hosted by a service provider and made available to users
Option A:	Infrastructure-as-a-Service (IaaS)
Option B:	Platform-as-a-Service (PaaS)
Option C:	Software-as-a-Service (SaaS)
Option D:	Cloud service
25.	what is green data centre?
Option A:	It is a server facility which utilizes energy-efficient technologies
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Option D:	
26.	Minimizing data movement and keep data close to reduce unnecessary activity is called as _____.
Option A:	Power polices
Option B:	data efficiency
Option C:	computational efficiency
Option D:	Idle efficiency
27.	Data efficiency can be achieved by _____.
Option A:	Managing I/O
Option B:	power policies
Option C:	C states
Option D:	Timer resolution
28.	Which metal is not prohibited by ROHS?
Option A:	Tungstan
Option B:	Lead
Option C:	cadmium
Option D:	mercury
29.	Context awareness can be achieved by _____.
Option A:	Managing I/O

Option B:	power policies
Option C:	Thresholding
Option D:	Timer resolution
30.	What is green data centre?
Option A:	It is a server facility which utilizes energy-efficient technologies
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Option C:	It cloud base mining warehouse
Option D:	It provides data on virtual platform

### Descriptive Question Bank

<b>Q No</b>	<b>10 marks each</b>
1	What is meant by green IT? Why is it gaining greater relevance and importance now?
2	What are the features that make cloud computing different from other distributed system
3	Describe the key facilities and IT components within data centres
4	Briefly describe and compare the major system level energy management schemes
5	Explain life cycle of a device or hardware in details
6	What are the key elements of data centre in IT infrastructure
7	Explain the business dimensions for Green IT transformation
8	What are the key metrics for data centre energy efficiency
9	Describe the strengths and weakness of G readiness framework
10	What must business and other organizations that are considering greening their IT do to gain better value from their green IT initiatives
11	Outline the current state development of sustainable IT services
12	Identify the potential risk in implementation of green IT technical project
13	Differentiate between RoHS, REACH and WEEE
14	Describe the quality attributes of Software
15	How can companies implement sustainable IT services development practices

<b>Q No</b>	<b>5 marks each</b>
1	What is a green data centre and why should it be on the radar screen for companies?
2	Explain the hierarchy of sustainability models
3	Discuss Primary sustainability dimensions of IT
4	What is difference between strategic thinking and strategic planning

5	What is green washing? Do you think companies engage in it
6	Distinguish between Green and Sustainable
7	Why is there an increasing need for green data storage
8	Which steps are required in developing a Green IT strategy
9	Explain four stages of LCA
10	Discuss the major Green IT and Standard regulations
11	What are the major elements of the value chain
12	Describe 3Rs of green IT
13	Describe the key facilities and IT components within data centres
14	What are the different power states of a hard disk
15	What are the objectives of green networking and communications