

- N. B.: (1) **All** questions are **compulsory**.  
 (2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.  
 (3) Answers to the **same question** must be **written together**.  
 (4) Numbers to the **right** indicate **marks**.  
 (5) Draw **neat labelled diagrams** wherever **necessary**.  
 (6) Use of **Non-programmable** calculators is **allowed**.

<b>I</b>	<b>Choose the correct alternative and rewrite the entire sentence with the correct alternative.</b>			<b>(30)</b>
<b>1.</b>	Type 1 hypervisors are often referred to as _____			
	<b>a.</b>	coated-metal hypervisors	<b>b.</b>	hypervisors isolation
	<b>c.</b>	<b>bare-metal hypervisors</b>	<b>d.</b>	oriented-metal hypervisors
<b>2.</b>	What is the foundation of the virtualization process?			
	<b>a.</b>	Vmware	<b>b.</b>	<b>VMkernel</b>
	<b>c.</b>	Vmserver	<b>d.</b>	Vmclient
<b>3.</b>	vCenter Server plays a central role in any sizable _____ vSphere implementation			
	<b>a.</b>	Oracle	<b>b.</b>	<b>Vmware</b>
	<b>c.</b>	Microsoft	<b>d.</b>	Google
<b>4.</b>	What provide the foundation for networking settings and third-party virtual switches?			
	<b>a.</b>	vSphere Storage DRS	<b>b.</b>	Enhanced vMotion Compatibility
	<b>c.</b>	<b>vSphere Distributed Switches</b>	<b>d.</b>	Network I/O Control
<b>5.</b>	What define the storage requirements for a VM and its virtual disks?			
	<b>a.</b>	<b>VM storage profiles</b>	<b>b.</b>	Host profiles
	<b>c.</b>	VMware vCenter Server	<b>d.</b>	VM Virtual SAN
<b>6.</b>	NICs should be at least _____ Ethernet			
	<b>a.</b>	bit	<b>b.</b>	kilobit
	<b>c.</b>	megabit	<b>d.</b>	<b>gigabit</b>
<b>7.</b>	To keep ESXi hosts and VMs updated, VUM uses _____			
	<b>a.</b>	<b>Baselines</b>	<b>b.</b>	Maintenance mode
	<b>c.</b>	Host/Cluster Settings	<b>d.</b>	Update mode
<b>8.</b>	VUM _____ can scan the hosts of versions _____ and above for updates to patches and extensions.			
	<b>a.</b>	6.0, 6.7	<b>b.</b>	<b>6.7, 6.0</b>
	<b>c.</b>	5.0, 5.7	<b>d.</b>	4.0, 5.0
<b>9.</b>	A software-based switch that resides in the _____ and provides traffic management for virtual machines			

	<b>a.</b>	<b>VMkernel</b>	<b>b.</b> physical adapter
	<b>c.</b>	ESXi hosts	<b>d.</b> virtual adapter
<b>10.</b>	What updates are a fact of life in today's IT departments?		
	<b>a.</b>	firmware and API	<b>b.</b> Software and hardware
	<b>c.</b>	<b>Software and firmware</b>	<b>d.</b> Hardware and firmware
<b>11.</b>	The _____ area is also where you would set the proxy configuration		
	<b>a.</b>	Network Configuration	<b>b.</b> Proxy Settings
	<b>c.</b>	<b>Download Settings</b>	<b>d.</b> Host/Cluster Settings
<b>12.</b>	Before an ESXi host is patched or upgraded, it is first placed into _____.		
	<b>a.</b>	Initial mode	<b>b.</b> <b>Maintenance mode</b>
	<b>c.</b>	Baselines	<b>d.</b> Installation mode
<b>13.</b>	Which statement is true regarding iSCSI adapters?		
	<b>a.</b>	hardware iSCSI adapters require vmkernel networking	<b>b.</b> <b>Independent Hardware iSCSI adapters offload processing from the ESXi host.</b>
	<b>c.</b>	Dependent Hardware iSCSI adapters do not require vmkernel networking	<b>d.</b> Independent Hardware iSCSI adapters require vmkernel networking
<b>14.</b>	Which is not the typical requirement for configuring Storage I/O Control		
	<b>a.</b>	The datastore must consist of only one extent.	<b>b.</b> The datastore is managed by a single vCenter Server.
	<b>c.</b>	Auto-tiered storage must be compatible with SIOC.	<b>d.</b> <b>Auto-tiered storage must be SSD or SATA.</b>
<b>15.</b>	Why does iSCSI use hardware and software initiators?		
	<b>a.</b>	To initiate connectivity to hardware and software components	<b>b.</b> To enable storage of data.
	<b>c.</b>	<b>To obtain native support within ESXi</b>	<b>d.</b> To establish network connectivity.
<b>16.</b>	Which is the most apt about vCenter HA are correct?		
	<b>a.</b>	ESXi 3.0 is required.	<b>b.</b> vCenter HA network latency between nodes must be less than 50 ms.
	<b>c.</b>	<b>NFS datastore is supported.</b>	<b>d.</b> It must be deployed on a 3 ESXi host cluster with DRS enabled
<b>17.</b>	Where does Fault Tolerance store the primary and secondary virtual machine files?		
	<b>a.</b>	Only local storage	<b>b.</b> Only shared storage
	<b>c.</b>	<b>Both shared and local storage</b>	<b>d.</b> SSD
<b>18.</b>	Which is the typical use case for Fibre Channel Zoning in a vSphere environment?		

	<b>a.</b>	Increases the number of targets presented to an ESXi host	<b>b.</b>	<b>Controls and isolates paths in a fabric</b>
	<b>c.</b>	Controls and isolates paths to an NFS share	<b>d.</b>	Can be used independent environments.
<b>19.</b>	_____ also aids restructure and automate the organization of VM focus.			
	<b>a.</b>	VMX Tools	<b>b.</b>	VMCD Tools
	<b>c.</b>	<b>VMware Tools</b>	<b>d.</b>	ESXi Tools
<b>20.</b>	Which one of the given options is same as normal VMware tools which is packaged differently?			
	<b>a.</b>	Formatting Tools	<b>b.</b>	Setup Tools
	<b>c.</b>	VM Tools	<b>d.</b>	<b>Open VM Tools</b>
<b>21.</b>	_____ clones can run with a single source of virtual machine.			
	<b>a.</b>	128	<b>b.</b>	200
	<b>c.</b>	<b>256</b>	<b>d.</b>	100
<b>22.</b>	The _____ feature provides a template for deploying a new VM.			
	<b>a.</b>	<b>Clone To Template</b>	<b>b.</b>	Cloning
	<b>c.</b>	Copy Template	<b>d.</b>	Create Template
<b>23.</b>	VMware ESXi uses _____ unlike memory-management skills to guarantee the host memory is used as efficiently as possible.			
	<b>a.</b>	3	<b>b.</b>	6
	<b>c.</b>	<b>5</b>	<b>d.</b>	1
<b>24.</b>	Creating a vApp is a _____ step process.			
	<b>a.</b>	<b>2</b>	<b>b.</b>	1
	<b>c.</b>	4	<b>d.</b>	3
<b>25.</b>	What are the alarms ?			
	<b>a.</b>	An alarm is a notification which appears when an event does not occurs.	<b>b.</b>	An alarm is a notification which appears when an event is delayed.
	<b>c.</b>	<b>An alarm is a notification which appears when an event occurs</b>	<b>d.</b>	An alarm is a notification which appears when an event is before time.
<b>26.</b>	Which two users are assigned the Administrator role at the ESX Server level by default?			
	<b>a.</b>	root, administrator	<b>b.</b>	<b>root, vpxuser</b>
	<b>c.</b>	root, vpxa	<b>d.</b>	root, hostd
<b>27.</b>	What happens to the files contained on shared storage When a Content Library is deleted?			
	<b>a.</b>	some data from stored files in content library will be deleted.	<b>b.</b>	all stored files in content library will be as it is.

	<b>c.</b>	<b>all stored files in content library will be deleted.</b>	<b>d.</b>	specific stored files in content library will be deleted.
<b>28.</b>	PowerShell, variables commence with a ___ accompanied through alphanumeric characters			
	<b>a.</b>	\$	<b>b.</b>	%
	<b>c.</b>	#	<b>d.</b>	*
<b>29.</b>	Command to update the product list on Ubuntu Linux is?			
	<b>a.</b>	sudo get update	<b>b.</b>	<b>sudo apt-get update</b>
	<b>c.</b>	sudo apt get update	<b>d.</b>	sudo apt update
<b>30.</b>	PowerShell provides the _____ cmdlet which can provide helpful information about cmdlets or topics within PowerShell.			
	<b>a.</b>	Set-Help	<b>b.</b>	Get-View
	<b>c.</b>	Get-Date	<b>d.</b>	<b>Get-Help</b>

<b>II</b>	<b>Attempt <i>any one</i> of the following:</b>	<b>6</b>
<b>a)</b>	Write short note on VMware ESXi Architecture. 1. Hypervisor. 2. Components of ESXi. 3. Planning Deployment.	
<b>b)</b>	What is Single Sign-On (SSO) service offered by Platform Services Controller? 1. Services Offered. 2. Steps for installing.	
<b>c)</b>	What are the five divided main areas of vSphere Web Client Home Screen? 1. Navigator. 2. Content Area. 3. Alarms and Work In Progress. 4. Recent Tasks. 5. Recent Objects.	
<b>2</b>	<b>Attempt <i>any one</i> of the following:</b>	<b>6</b>
<b>a)</b>	What are the steps for Upgrading Hosts with vSphere Update Manager? Perform the following steps to upgrade a host server with VUM 6.0: 1. Import an ESXi image and create a host upgrade baseline. 2. Upgrade the host by remediating with the upgrade baseline. 3. Upgrade the VMs' VMware Tools and hardware.	
<b>b)</b>	What is ESXi Dump Collector? 1. Definition. 2. Services. 3. Configuration.	
<b>c)</b>	Write short note on vSphere Update Manager (VUM). 1. Definition. 2. Structure. 3. Coordination with other components.	
<b>3</b>	<b>Attempt <i>any one</i> of the following:</b>	<b>6</b>
<b>a)</b>	List the elements which constructs shared storage array. 1. External Connectivity.	

		<ul style="list-style-type: none"> <li>2. Storage processor.</li> <li>3. Array Software.</li> <li>4. Cache Memory.</li> <li>5. Disks.</li> <li>6. Bandwidth.</li> </ul>	
	<b>b)</b>	<p>What is RAID? Explain different levels in it.</p> <ul style="list-style-type: none"> <li>1. Definition.</li> <li>2. Purpose.</li> <li>3. Levels.</li> </ul>	
	<b>c)</b>	<p>Write short note on iSCSI.</p> <ul style="list-style-type: none"> <li>1. Definition.</li> <li>2. Structure.</li> <li>3. Topology.</li> </ul>	
<b>4</b>	<b>Attempt <u>any one</u> of the following:</b>		<b>6</b>
	<b>a)</b>	What are the steps for creating a Virtual Machine?	
	<b>b)</b>	<p>What are the ways in which Optical Disks can be accessed in Virtual Machines?</p> <ul style="list-style-type: none"> <li>1. Client Device.</li> <li>2. Host Device.</li> <li>3. Datastore or Library ISO File</li> </ul>	
	<b>c)</b>	<p>Write short note frozen Virtual Machine.</p> <ul style="list-style-type: none"> <li>1. Definition.</li> <li>2. Purpose.</li> <li>3. Functioning.</li> </ul>	
<b>5</b>	<b>Attempt <u>any one</u> of the following:</b>		<b>6</b>
	<b>a)</b>	<p>Write short note on Alarm.</p> <ul style="list-style-type: none"> <li>1. Definition.</li> <li>2. Scope.</li> <li>3. Creating Alarms.</li> </ul>	
	<b>b)</b>	<p>Explain the following terms:</p> <ul style="list-style-type: none"> <li>a. Cmdlets</li> <li>b. Objects</li> <li>c. Variables</li> <li>d. Pipeline</li> </ul>	
	<b>c)</b>	<p>What is the difference between Allocation and Utilization?</p> <ul style="list-style-type: none"> <li>1. Definition.</li> <li>2. Mechanisms.</li> <li>3. Addressing Situation</li> </ul>	