

Practical Paper

Subject: Virtual System and Services

Time: 2Hour

Max Marks: 100

Question#1.

25-Marks

Configure vMotion between two ESXi hosts and migrate a running VM. Document network requirements and performance impact.

Question#2.

25-Marks

You have a virtualization host that has four processors, and each processor has four cores. According to the vendor guidelines, the virtualization solution you've chosen will support up to 18 vCPUs per physical CPU. If you want to keep about 20 percent of your CPU capacity in reserve for growth and performance spikes, how many single vCPU virtual machines will you be able to deploy on this host?

Question#3.

25-Marks

Analyze the role of paravirtualization in improving VM performance. Compare VirtIO (KVM) and PV drivers (Xen) in terms of latency and throughput. Include diagrams to illustrate how paravirtualized I/O avoids emulation overhead.

Question#4. Viva-Voce

25-Marks