**Sample Questions Set 3**

Q1. What are the difference between a process and a service? (2 points)

**A process is an instance of a particular executable (.exe program file) running.**  
  
**A service is a process which runs in the background and does not interact with the desktop.**

Q2. Write PowerShell cmdlet/script (2 points each)

1. to count the number of running processes.

**(Get-Service | Where-Object Status -eq "Running").Count**

1. to create a file name angel.txt on c drive

**New-Item –Path “C:\” -Nam “angel.txt” -ItemType File**

1. to show the last 20 log entries from system log

**Get-EventLog -LogName System –Newest 20**

1. to show the free space on different drives

**Get-CimInstance -ClassName Win32\_LogicalDisk | Select-Object -Property DeviceID,FreeSpace**

1. to show the total virtual memory used by all processes

**Get-Process**

1. to show all the network related processes

**Get-NetTCPConnection -State Established**

Q3. List the latest twenty error messages from the system event log. Only return the messages – no further columns.

**Get-EventLog -LogName System -EntryType Error -Newest 20**

Q4. Show only the stopped services

**(Get-Service | Where-Object Status -eq "Stopped").Count**

Q5. Write a script that will show the free space on different drives.

**Get-Volume**

Q6. Find all pdf files created on September 2021 on your Desktop folder.

**Get-ChildItem -Path C:\Users\cuip1\Desktop\\*.pdf | Where-Object {$\_.LastWritetime -gt ‘9/1/2021’ -and {$\_.LastWritetime -gt ‘9/30/2021’ }**

Q7. Use powershell to create a folder. Use loop to create 20 files with the names file1, file2….file20 and 20 directories with name dir1, dir2, …dir20 inside the folder you created for

**Function FileFolderLoop {**

**For ($folder=0; $folder -le 20; $folder++)**

**{**

**New-item -ItemType Directory -Path “C:\Exam”**

**}**

**}**