Task(s)	Full Marks	Marks Awarded
A1. Package Management Install the httpd software package	 1	
A2. Process Management Start the httpd service and ensure that it is started automatically every time the system reboots. Stop the sshd service now and ensure it is NOT started automatically every time the system reboots.	 1 1	
A3. User and Group Account Creation Create a user name “jenny” as follows: • she belongs to a primary group “secretary” • she belongs to two secondary groups “support” and “staff” Create another user “jazzie” as follows: • she belongs to a primary group “staff”	 1 1 2 1 1	
A4. Basic Permissions • Create a directory /practice-test3 and set the permissions as follows: o Owner is jenny o Group owner is support o Permissions should be drwx-rw-r-- • Create a file /practice-test3/testfile3.txt and set the permissions as follows: o Owner is jazzie o Group owner is staff o Permissions should be –rw-rw-r--	 1 1 1 1 1 1	

<table>
<tr><th>Task(s)</th><th>Full Marks</th><th>Marks Awarded</th></tr>
<tr><td>

A5. Partitioning a new hard disk

Attach one additional harddisk to the VM with a size of 1 GB.

Partition the harddisk as follows:

Partition #	Device ID	Partition Type	Size in MB	Partition ID	File system	Mounting point	Mount options
1	/dev/sdb1	Primary	200 MB	Linux	ext4	/mnt/sdb1	Defaults
2	/dev/sdb2	Primary	250 MB	Linux	ext4	/mnt/sdb2	Defaults
3	/dev/sdb3	Primary	100MB	Linux swap	swap	-	Defaults
4	/dev/sdb4	Extended	Balance				
5	/dev/sdb5	Logical	300 MB	Linux LVM	-	-	-
6	/dev/sdb6	Logical	Balance	Linux LVM	-	-	-

All partitions shall be mounted persistently.

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A6. Logical volume manager

- Create an LVM volume group named vg1 from the 2 Linux LVM partitions that you have created in A5.
- Create a logical volume named lv1 with the size of 30 physical extends
- Create an ext4 file system on lv1
- Mount the new file system at /mnt/lv1 persistently

</td><td>5</td><td></td></tr>
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A7. Default permissions (write your answers here)

If the umask is 025, write down the permissions of the new file and directory created (you can use rwx to represent the permissions):

New files created will have this permission: _____

New directories created will have this permission: _____

</td><td>2</td><td></td></tr>
</table>

A8. Scheduling Job Schedule a system cronjob that runs every Wednesday at 11:45pm using “jenny” account. The cronjob creates a bzip2 tar archive (filename ~/DDMMYY-home.tar.bz2 where DD is the 2-digit day of the month, MM is the 2-digit month of the year and YYYY is the 4-digit year of the date of job execution) that contains the entire /home/jenny folder (including subfolders and files).	3	
Total	30	