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| Lesson 7 – Paper Quiz (Open Book - No Internet) |
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|---------------|------------------------|
| Student ID: | Time: 30 Mins |
| Student Name: | Total Marks: _____ /20 |

Section A- Multiple Choice Questions. Choose ONLY ONE (1) correct option. (2 *1=2 marks)

1. The number of instructions or operations a processor can execute per second is referred as _____.
 - a. Instruction processor
 - b. Bandwidth
 - c. Clock speed
 - d. Frequency

2. Which ONE of the following is an **ADVANTAGE** of having a multi-core CPU in a computer system?
 - a. Increase the time taken to complete a process
 - b. Reduce electricity consumption
 - c. Reduce heat generation within the chassis
 - d. Reduce processes waiting time

Answer: _____

Section B – Multiple Response Questions. Choose TWO (2) answers for each question (2*2=4 marks)

3. Which **TWO** of the following statements are **TRUE** about Registers?
 - a. It is the high-speed memory located within the CPU.
 - b. Stores copies of most frequently used data
 - c. Perform fetch-decode-execute-store
 - d. It is a non-volatile memory
 - e. Slower and less expensive than secondary storage

4. Which **TWO** of the following statements are **NOT** the key function(s) of an operating system?
 - a. It performs general housekeeping tasks for the computer such as deletion of unwanted files and file compression.
 - b. It manages the available memory for the system.
 - c. It creates a chart in Microsoft Excel using the data from Microsoft Access and incorporates the chart into Microsoft Word document.
 - d. It manages the computer system's peripheral and hardware devices.
 - e. It keeps tracks of processor and status of process.

Section C: Practical Quiz (14 marks)

Question 5 (12 marks)

Due to the space constraint, you have added a new hard disk of size 2GiB to your system as shown below. **Login as student user then switch to the root user** to answer all questions in this section with reference to the new hard disk.

```
Disk /dev/sdb: 2 GiB, 2147483648 bytes, 4194304 sectors
Disk model: VMware Virtual S
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x6d8447d9
```

Write down the commands and steps to create one primary partitions **/dev/sdb2** of size **500MB** in the new hard disk and update the Linux kernel on the changes in the partition table and mount the partition **/dev/sdb2** to the folder **/Quiz/test2** with ext4 format.

Need to write all steps required to generate the screenshot provided below.

Steps to be included are:

- I. Command to partition the new disk.
- II. Sequence of steps in creating a partition using the utility command (eg:- m)
- III. Update the Linux kernel.
- IV. Creating mount directory
- V. Making file system
- VI. Mounting

```
root@ubuntu:~#
root@ubuntu:~# lsblk /dev/sdb
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
sdb   8:16   0   2G  0 disk
└─sdb2 8:18   0 500M  0 part /Quiz/test2
root@ubuntu:~# mount | grep /Quiz/test2
/dev/sdb2 on /Quiz/test2 type ext4 (rw,relatime)
root@ubuntu:~#
```

Partition the new disk:

`fdisk /dev/sdb` (2 marks)

Create first partition:

`n -> p -> 1 -> +500M +w` (3 marks)

Update Linux Kernel:

`partprobe /dev/sdb` (1 mark)

or

`partprobe`

Creating mount directory correctly. Accept all correct answer – 2 marks

```
mkdir -p /Quiz/test5 (or)
```

```
mkdir /Quiz
```

```
mkdir /Quiz/test5
```

Making file system – 2 marks

```
mkfs.ext4 /dev/sdb2 (or)
```

```
mkfs -t ext4 /dev/sdb2
```

Mounting correctly – 2 marks

```
mount /dev/sdb2 /Quiz/test2
```

Question 6

What are the **TWO** advantages of having multiple partitions in a hard disk drive? **(2 marks)**

- separates OS + application software from user data files.
- dual boot.