**DV162\_34\_PAS\_On An Overview of Memory**

**Possible Answer Sheets**

Q1. What is RAM?

Ans: RAM stands for Random Access Memory, it is the memory where our computer temporarily stores instructions for CPU or Processor.

Q2. What type of memory slots are used in computers nowadays?

Ans: Nowadays, practically everyone uses exactly the same type of memory slots in their computers. These are designed to transfer data very quickly between the information that’s in the memory modules and the CPU of your system.

Q3. The specific type of memory in your system can vary widely so make sure you look at your\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to know exactly what type of memory needs to be installed in those memory slots.

Ans. Motherboard

Q4. What is a SO-DIMM?

Ans: SO-DIMM stands for Small Outline Dual Inline Memory Module, it is about half of the size of normal DIMM, this memory is very common in today's laptops where space is precious.

Q5. How do you install a DIMM onto memory slots on a motherboard?

Ans: First we fit the DIMM in a designated slot on the motherboard and then pushdown and lock in that place.

Q6. Another common specification for these DIMMs is information is transferred in and out of the DIMM in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_data widths.

Ans. 64 bit.

Q7. What type of memory modules are typically used on laptops?

Ans: SO-DIMM (Small Outline Dual inline Memory Module).

Q8. What type of memory should I install in the memory slots of my system?

Ans: We should install that memory in the memory slots that can fit in the slots or have scaled size, as the notch given on every memory is at different places so we can not install any memory in our system.

Q9. What is the black component on memory modules?

Ans: RAM (Random Access Memory)

Q10. Why do we refer to RAM as a D-RAM?

Ans. Because D-RAM (Dynamic Random Access Memory) constantly needs to be refreshed so Data does not disappear. There always will be a power source that provides that refreshing information to these memory modules.

Q11. What does the random part of random access memory mean?

Ans: It means we can access any data that is on any part of the module by simply asking for it, we don’t need to fast forward or rewind through the module.

Q12. What is the clock on our system used for?

Ans: Regulate the flow of data in and out of Memory Modules.

Q13. Why are there notches on the bottom of the DIMMs and SO-DIMMs?

Ans: These notches are for protecting the wrong type of memory module installation onto the motherboard.

Q14. What if you try to install a DDR2 module into a system with a DDR3 slot?

Ans. Particular location of the notch will not allow us to install the memory.

Q15. What is the difference between SDR memory and DDR memory?

Ans: SRD stands for Single Data Rate and DDR stands for Double Data rate, and this data rate means how much a single cycle is able to transfer data. Like SDR transfer single bit data in one cycle and DDR sends double of SDR data in one cycle.

Q16. What does DDR stand for?

Ans. DDR stands for Double Data Rate.

Q17. Why do we use DDR?

Ans. To increase the rate of transferring data with twice the speed of SDR.

Q18. \_\_\_\_\_\_\_\_\_\_\_allowed you to increase the data rates to be twice as fast as those older DDR2 systems.

Ans. DDR3.

Q19. What is the maximum RAM of DDR3 memory modules?

Ans: 16 GB per module.

Q20. What does the notch at the bottom of a DDR3 memory module do?

Ans: Notch at the bottom of DDR3 ensures that it will only install in the system that can support DDR3.

Q21. What is the maximum amount of storage on a single DDR4 module?

Ans: 64 GB over single DIMM.

Q22. What type of memory is supported by newer motherboards?

Ans: DDR5

Q23. What is the difference between DDR4 and DDR5 memory?

Ans: One of the main differences is speed, DDR4 operates at effective speed up-to 3200Mhz and DDR5 can operate at effective speeds up-to 6400 Mhz.