**DV162\_38\_PAS\_On Motherboard Expansion Slots**

**Possible Answers Sheet**

Q1. What components are attached to a motherboard?

Ans: CPU, memory, storage and expansion slots.

Q2. What is the purpose of a motherboard?

Ans: To give power and to connect many components like memory, Processor, and graphic cards. And make them able to communicate with each other.

Q3. What allows components on a motherboard to communicate with each other?

Ans: Communication Path called Bus allows components on a motherboard to communicate with each other.

Q4. What does PCI stand for?

Ans. Peripheral Component Interconnect.

Q5. PCI is a standard that’s been around since \_\_\_\_\_\_\_\_\_\_\_.

Ans. 1994.

Q6. Are there different bus sizes for PCI?

Ans: Yes, there are different bus sizes for PCI.

Q7. What kind of communication does PCI use?

Ans: Parallel Communication.

Q8. Is PCI still used in modern computers?

Ans: No, Now it can be found in legacy devices.

Q9. PCI is a type of connector that you might find on \_\_\_\_\_\_\_\_\_\_\_\_\_.

Ans. Legacy Devices.

Q10. What type of expansion slots are present on the motherboard?

Ans: PCI (Peripheral Component Interconnect ) and PCIe (PCI Express) expansion slots.

Q11. What is the difference between a 32-bit and 64-bit expansion slot?

Ans: A 32-bit slot can handle 32 bits of data at a time, while a 64-bit slot can handle 64 bits which is double than 32 bits. This translates to faster transfer speeds for 64-bit interfaces.

Q12. What voltages do the PCI expansion cards support?

Ans: PCI expansion cards support 3.3 V and 5 V.

Q13. Everything that’s on the back of this card has extra contacts that designate the 64-bit width of this bus. (True/False?

Ans. True.

Q14. What indicates that the card is a 64-bit card?

Ans: 64-bit card has 64 bit key and additional contact on the back of the card.

Q15. What is the key in the adapter used for?

Ans: Key in the adapter used for voltage being used.

Q16. How do we install the card?

Ans: We would put it right on the top of that PCI interface, and then we would gently press down so that all of these contacts are going directly into the slot itself on the motherboard. If it’s difficult to see those copper contacts, then it means we have installed this card properly.

Q17. What replaces the PCI bus on newer computers?

Ans: PCIe (PCI Express) Bus.

Q18. What type of connection does PCI Express use?

Ans: Serial Connection.

Q19. What is the communication path used by PCI Express devices?

Ans: PCI Express Lane.

Q20. How many full-duplex lanes are available on a PCI express bus?

Ans: PCI Express links come in various configurations, offering different numbers of lanes. Common configurations include x1,x4,x8 , and x16. The higher the lane count, the more data can be transferred simultaneously, resulting in faster Communication.

Q21. How can we increase the bandwidth between the two devices?

Ans: By using expansion slots that have more lanes.

Q22. What type of expansion slots are on the motherboard?

Ans: PCI (Peripheral Component Interconnect ) and PCIe (PCI Express) expansion slots.

Q23. What does a PCI express adapter card look like?

Ans: PCI express adapter cards look very similar to the PCI Adapter, but the slots and the number of contacts on the card are very different from PCI adapter. PCI express adapter cards have hook at the end that help lock the card into the slot.

Q24. How do you install a PCI express adapter?

Ans: To install a PCI express adapter, we usually put the hook or lock into the adapter slot first and then push down very gently to slide the rest of the card down into the adapter slot.

Q25. What should you do if the card is not installed?

Ans: We install the card if needed.

Q26. What is needed to ensure a card slides into a slot easily?

Ans: Everything needs to be aligned to ensure a card slides into the slot easily.