Easy | Deputy Executive Engineer (Electric | 2026 | orts Authority of Gujarat / Assistant Engineer (El

Regarding HMI (Human Machine Interface) in automation: 1. It allows operators to interact with the PLC and monitor machine status. 2. HMIs are connected to PLCs using

A All of the above

B 2 and 3 only

C 1 only

D **1 and 2 only** Correct

Correct Answer: D

Full Detailed Explanation

Correct Answer: D - 1 and 2 only Quick Concept Explanation An HMI is the operator-facing interface to PLC/automation data. It can display graphical process mimic screens, trends, alarms, animations and controls, and commonly communicates over Ethernet or serial industrial links such as RS-485. Key relation: HMI reads/writes tags exposed by PLC/SCADA systems.Exam focus: Use HMI for visualization and operator commands, not primary hardwired safety functions. Common trap: Modern HMIs are not text-only displays. Statement-wise Verification Statement 1 - Correct.It allows operators to interact with the PLC and monitor machine status.HMI reads/writes tags exposed by PLC/SCADA systems. Statement 2 - Correct.HMIs are connected to PLCs using communication ports like Ethernet or RS-485.It can display graphical process mimic screens, trends, alarms, animations and controls, and commonly communicates over Ethernet or serial industrial links such as RS-485. Statement 3 - Incorrect.An HMI can only display text and cannot show graphical animations of processes.Modern HMIs provide graphics, trends, alarms and animated process mimic displays Core Concept An HMI is the operator-facing interface to PLC/automation data. It can display graphical process mimic screens, trends, alarms, animations and controls, and commonly communicates over Ethernet or serial industrial links such as RS-485. Formula / Key