Project Design Phase-I
Solution Architecture

Date	15 NOVEMBER 2022
Team ID	PNT2022TMID45101
Project Name	Industry-specific intelligent fire management system
Maximum Marks	4 Marks

Solution Architecture Diagram:

Light Intensity sensor senses light activity

Gas/smoke sensor senses gas/smoke

Relay module triggers the Fire Alarm

Arduino triggers the relay module

360° Servo rotates to camera and sensor location

Flash camera gets triggered and takes snap of the location & sends it to the Arduino

Arduino receives the data & sends it to the router via ESP-01

Admin checks if there is a fire activity and replies "Fire OK" or "No Fire" for the next action & also takes necessary steps

Raspberry pi 3 routes to each Arduino Mega via Ip and scans for data, If snap is found Rp forwards to the GSM module & waits for next command

Raspberry pi checks the reply and if gets 1 it forwards it to the Arduino for next action the data

GSM module sends message to the adminstrator and waits for AT command to proceed to the next action

GSM module receives the command and son do 0 or 1 to the raspberry