**SMARTBRIDGE EXTERNSHIP – Internet of Things (IoT)**

**Assessment – 1**

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Question:

List out 20 use cases of the Internet of Things.

Answer:

1. Smart Factories:
   1. Increased operational efficiency.
   2. Better control over sales lifecycle.
   3. Energy efficiency.
   4. More responsive smart environment.
2. Smart Cities:
   1. Outdoor surveillance.
   2. Smart lighting.
   3. Smart parking.
   4. Automated Toll collection in Highway.
3. Water Management:
   1. Water Conservation.
   2. Smart irrigation.
   3. Smart Filtering (Water Quality Management).
   4. Leakage Management.
4. Digital Health Monitoring System:
   1. Fall detection.
   2. Oxygen level.
   3. Heartbeat, other physical sensors.
   4. Remote patient monitoring.
5. Smart Retail:
   1. NFC and Wi-Fi Payments.
   2. Supply chain control.
   3. Smart Product Management.
6. Smart Workspace:
   1. Sociometric Badges.
   2. Biometric attendance.
7. Smart Home:
   1. Remote Control Appliances.
   2. Smart security system.
      1. Smoke detection.
      2. Fire detection.
      3. Energy fluctuation detection.
      4. Security Camera feed.
8. Home Intrusion Detection System:
   1. Smart locks.
   2. Motion detection.
9. Smart Logistics:
   1. Fleet tracking (truck tracking/GPS monitoring).
   2. Platooning (Self driving trucks).
   3. Connected Vehicles using AI.
10. Smart Grid:
    1. Reducing energy consumptions.
    2. Better power flow in and out of grids.
11. Autonomous and Connected Vehicles:
    1. Various levels of autonomy from level 5 to 4.
    2. Level 5 autonomy cars.
12. Smart Watches and Fitness trackers:
    1. Smart watched to track, manage and secure your fitness data.
    2. Mini smart phone in your wrist with all the functionality needed.
13. Machine to Machine connected Device:
    1. IoT enabled machines to work smarter.
    2. Mapping machine workloads, inputs and outputs.
    3. Energy efficiency.
14. Drones for Industrial and Search & Rescue Operations:
    1. To monitor deforestation.
    2. To deliver goods to the buyer.
15. Gesture Controlled Robots:
    1. Useful for old age and physically challenged people.
16. Companion Robots:
    1. Cleaning robots.
17. AR/VR:
    1. Extended Reality Experience.
    2. VR places user in a digital world.
18. Smart Metering:
    1. Measure’s energy, water, electricity, natural gas consumption of a building or home.
    2. Reduce energy theft.
19. Asset Tracking:
    1. easily locate and monitor key assets.
    2. To detect theft. Optimize logistics, maintain inventory levels.
20. IoT Based Pest Control:
    1. Keeps track of pest population.
    2. Connected traps, cages, etc.
21. Redefining Field Intel’s for Oil and Gas Industries.
22. IoT Use Case in IT/Operational Technology:
    1. Scalable IoT Operations Management.
    2. IoT Data Integration.
    3. Automated Analytics and Actions.