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| ø1 | What is IoT? Explain its components and applica |
| Ī | what is IoT? Explain its components and applica |
| HS | Octinition: Internet of things is netword of physical objects embedded with sensors, actuators, micromontrollers, softwares and communication mode for the purpose of communication and cata exchange between different devices. |
| | sensors, actuators, micronontrollers, |
| | for the purpose of communication any |
| | data exchange between different |
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| | Components . |
| | Internet of Things can be divided in |
| e de la companya de l | |
| | a) Hardware: The hardware components includes sensors, actuators, microconing and communication modules. |
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| | b) Software: The software components mela operations systems, applications and connect protocols |
| - 1 | |
| | Communications: The network components incomponents incomponent, wi-fi, Bluetooth, Cable connect etc. |
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Applications Internet of things finds itself in wide range of use-cases: a Smart - Home Automation: Automatic door locks, Smart lights, Smart kitchen appliances like Micro-oven, Refrigirator, etc. are some of the application of JoI in making home a smarter b) Infrastructure: Smart street lights that turns off or on basel on human presence and time of the cay smart garden fountains, smart parking lots where automatic indicators are present for vehicles for vacant What are IP and TCP protecols in the Internet? Explain their functions and Definition: Internet protocol is a communwhich is a part of model and is the ication protocol TCP/IP Network

mainstream protocol used internet. It deals with providing addresses for devices internet. IP addresses are 6 of two types

I IPv4: The a current widely accepted

I IPv6: The newer protocol pricking y the use-cas Refinition: Transmission control protocol is a Communication protocol which is also a part of TCP/IP model and is a widely used protocol. It deals with port addressing and session management for connection between devices on the internet. ICP utilizes the concept of port addressing to manage sessions for a device. It helps to build multiple connection for a single device for multiple applications while IP protections concern themselves to the virtue connection setup to ensure a reliable internet route from source to destination host.

| what are electronics sensors and actuals in IoT devices? Explain uneix functions and types. [t] IoT devices consists of hardwards components that include electronics and actuators. [t] These components actually work the real life physical objects sense and precess act in order a achieve a physical change or obsession. [t] Electronics: [t] Second actuators. [t] Electronics: [t] Second actuators are a crucial change or obsessions are a crucial of the control of other hardware components. [t] Electronics: include PCBs, Religions are a crucial the control of other hardware components. [t] Sensors: have the purpose the switches, TCs, etc. [t] Sensors: have the properties sense physical objects properties are a crucial the environment and transmit the environment and transmit the environment of observer are an instrument or observer. | -/ |
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| | F-1 Data of Cl : // |
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| | means more data generated to |
| | be stored and computed. |
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| | amount of Jot devices is leading |
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| | ran possible Com the challons |
| | [+] Notedow the solution for the challenge we face above, are given below: |
| 272.9.5 | we face house , and |
| 1 5 5 7 X | [-] Techniques like encryption, data private & protection, secure communication protofocols can solve the network security issue |
| | & protection, secure communication |
| Local | protofocols can solve the network |
| | security issue |
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| | ger one-stop solution for data |
| | storage as well as processing at |
| - 13 | much reduced cost and power |
| - | consumption. |
| - | [-] Harvesting renewable energies like |
| - | Li Harvesting hydro con be a |
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| 02 | What is an APJ ? Explain its importance |
| -c/ | in IoI design |
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| | TO ADD Secretion programming int |
| - 0 | [1] API or application programming interface beta |
| 200 | two distinct applications same or distinct devices. |
| | same or distinct devices. |
| 1 10 10 10 | PA Design ALIVER CONTROL CONTR |
| 10/ | [+] It is the ability of application to talk with each other, exch |
| | to talk with each other, exch |
| 1303 | data or communicate without to |
| N. P. | telying of on the knowledge for |
| | how the application are designed & work. |
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| | [t] Jot devices require a wide range |
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| | Levice would have its own |
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| | [7] Basically Tat day |
| -3 | need for APJs as the fundamen |
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| | need for APJs as the very a working together. Is diverse applies |
| | It the purple II - 1 . |
| | (4) for example, A standard APJ like RES APJ is Used for Client and serve to talk with each other with comple different applications |
| | to talk with each other and serve |
| | different applications with compa |