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தமிழ் நாடு அரசு

தொழில்நுட்பக் கல்வித் துறை, சென்னை 600 025 - வாரியத் தேர்வுகள்

அடுத்தப் பக்கத்தில் கொடுக்கப்பட்டுள்ள குறிப்புகளை படிக்கவும் (Read the instructions given in the next page)

Q. No.	A	B	C	Q. No.	A	B	C	Q. No.	A	B	C	Q. No.	A	B	C
1.				9.				17.				25.			
2.				10.				18.				26.			
3.				11.				19.				27.			
4.				12.				20.				28.			
5.				13.				21.				29.			
6.				14.				22.				30.			
7.				15.				23.				31.			
8.				16.				24.				Total Marks			

For Revaluation

For Central Valuation

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1.	0			9.				17.				25.			
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6.	1			14.				22.				30.			
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Question Paper Code No.

வினாத்தாளின் குறியீட்டு எண்

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No. of P: எழுதப்பட்ட

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Date of Examination :

தேர்வு நாள்

14/11/24

Subject Name :

படத்தின் பெயர்

CLOUD COMPUTING AND INTERNET OF THINGS

Perforations to tear fly slip

1) compute cloud:

The compute cloud is a virtual server to working. Then the server is remote desktop to access in physical computer

தேர்வாளர்களுக்கான அறிவுரைகள்
INSTRUCTIONS TO CANDIDATES

1. விடைத்தாள் மாற்றிப் பெறுவதற்கு.
Get the answer book replaced, if
 - விடைத்தாள் சரியாக சேர்ந்து பின் செய்யப்படாமல் இருந்தால்.
 - it is not stapled properly
 - விடைத்தாள் புத்தகப் பக்கங்களின் வரிசை எண் விடுபட்டிருந்தாலோ அல்லது வரிசையாக இல்லாமலிருந்தாலோ (மொத்தம் 30 பக்கங்கள்).
 - the page numbers are missing or not in order (there shall be 30 pages continuously numbered)
 - தலைப்பு பக்கத்தில் விடைத்தாள் புத்தகத்தின் கீழ்பகுதியில் வரிசை எண் அச்சிடப்படாமலிருந்தால்.
 - the serial number of the answer book is not printed at the bottom of the title page
2. உங்களுடைய பதிவு எண்ணையும், பெயரையும் அதற்காக கொடுக்கப்பட்டுள்ள தலைப்பு பக்கத்தின் கீழ்பகுதியில் மட்டும் எழுதவும்; அதைத் தவிர்த்து பதிவு எண், பெயர் ஆகியவற்றை விடைத்தாளில் மற்றப் பக்கங்களில் எழுதக்கூடாது. எந்தவிதமான அடையாளக் குறியீட்டையும் விடைத்தாளில் எழுதக்கூடாது.
You are prohibited from writing your REGISTER NUMBER or NAME in any part of the answer book, other than the space provided at the bottom of the title page. You are prohibited from writing or leaving any distinguishing marks so as to identify your answer book.
3. தலைப்புப் பக்கத்தில் கொடுக்கப்பட்டுள்ள அதற்குரிய கட்டங்களில் விவரங்களை எழுதவும்.
Fill up all the particulars, in the relevant boxes, in the title page.
4. கேள்விகளுக்கு பதில் எழுதும் போது விடைத்தாளில் இரண்டு பக்கங்களையும் பயன்படுத்த வேண்டும். பக்கங்களில் தொடர்ந்து விடை எழுதாமல் வெற்றிடம் விடக் கூடாது.
Use both sides of the paper for answering questions, without leaving spaces/ lines in between.
5. இந்த விடைத்தாள் புத்தகம் போதுமான பக்கங்களை கொண்டிருக்கிறது. இதைத் தவிர கூடுதல் விடைத்தாள் அளிக்கப்படமாட்டாது.
This answer book contains sufficient pages and no additional sheets will be issued.
6. கேள்விக்கு விடையளிக்கும் முன்பு வினாத்தாள் எண், வருடம், மாதம், காலம் இவைகளை சரிபார்க்கவும்.
Check the Code Number, Month and year of Examination? Duration etc., in the question paper before answering the questions.
7. கொடுக்கப்பட்டுள்ள வரைப்படத்தாள் / கிராப் ஷூட் தவிர வேறு எந்த விடைத்தாளையும் சேர்க்க கூடாது. விடைத்தாள் புத்தகத்திலிருந்து எந்த பக்கத்தையும் கிழிக்கக் கூடாது.
No extra sheet is to be attached except the drawing/graph sheets supplied and no sheet is to be teared from the answer book.
8. கைபேசி, துண்டுக் காகிதம் மற்றும் தடை செய்யப்பட்ட இதர பொருட்கள் வைத்திருத்தல், தேர்வுக்கு எதிரான முறைகேடுகளில் ஈடுபடுதல் அனைத்தும் தேர்வு வாரிய விதிகளின்படி தண்டனைக்குரிய குற்றமாகும்.
POSSESSION OF ANY PROHIBITED MATERIAL, CELL PHONE, BITS OF PAPERS, etc., AND INVOLVEMENT IN MALPRACTICE OF ANY NATURE SHALL BE PUNISHABLE AS PER BOARD'S RULES.
9. நீலம் அல்லது கறுப்பு நிற மையினால் மட்டுமே விடை எழுத வேண்டும். தலைப்பு பதிவு பிறகு விடை எழுத வேண்டும்.



PART-B

11. (b) Discuss about cloud scenarios and web services.

The cloud scenarios working in the computers or server then to use and then to store the data is used to simple object services and then application to run then used the Google app engine.

There are three types cloud scenarios.

i) compute cloud

ii) cloud storage

iii) cloud application

i) compute cloud:

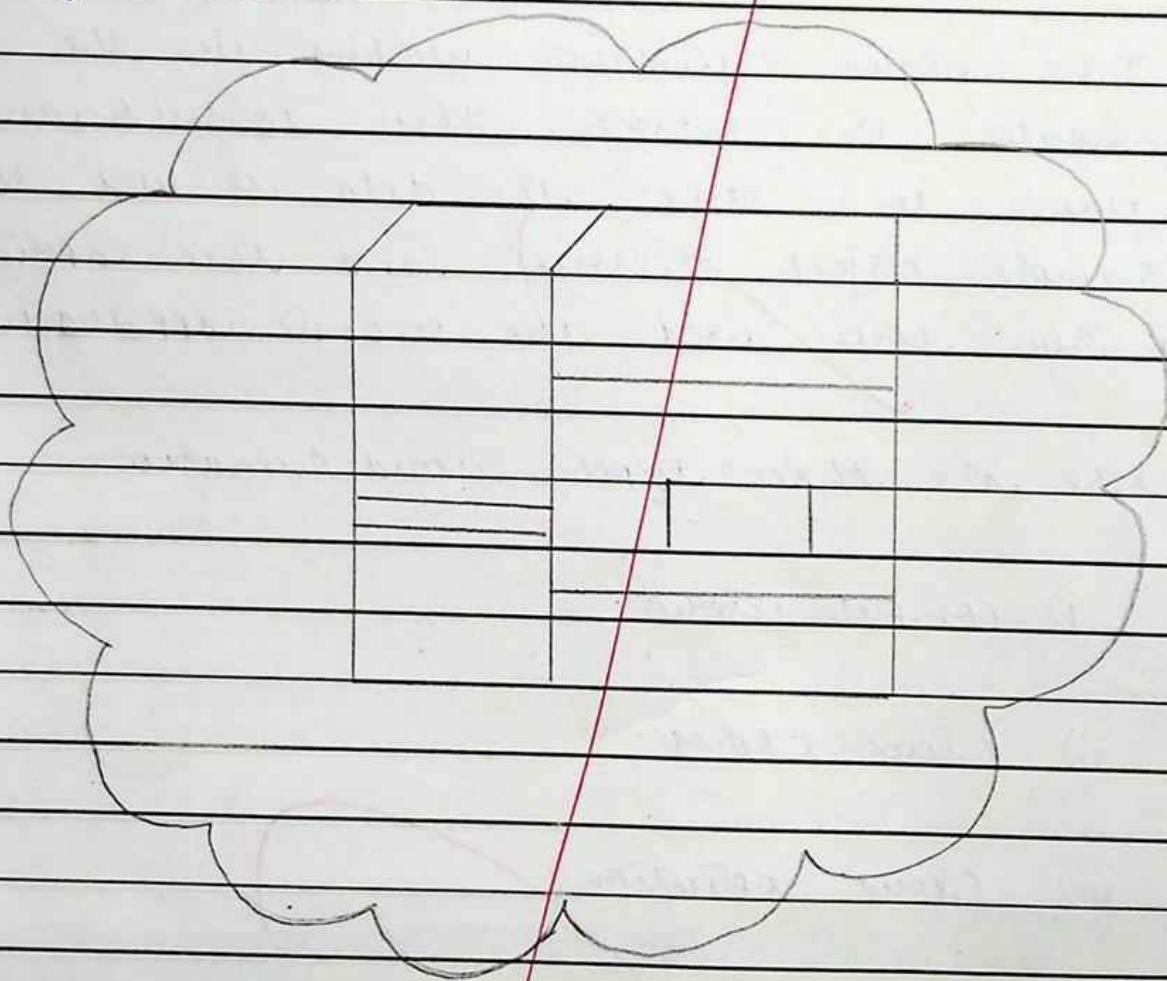
The compute cloud is a virtual server to working. Then the server to remote desktop to access in physical computer



To the working the virtual server is throw internet.

Eg: EC2, Google app Engine, server

Diagram:



The compute cloud is your working uses increase then you can upgrade your virtual server in the cloud.



ii) Cloud Storage:

The cloud storage is a virtual storage EX: Google Drive. The cloud storage data is 'big the world' to fast to store and retrieve your data or object. To the data is secured configured in your data EX: Disaster recovery and many types of securely stored your data.

EX: S3, Google Drive.

Characteristics:

* The your data is stored in S3 is store in object. EX: TEXT, MP4, DOC.

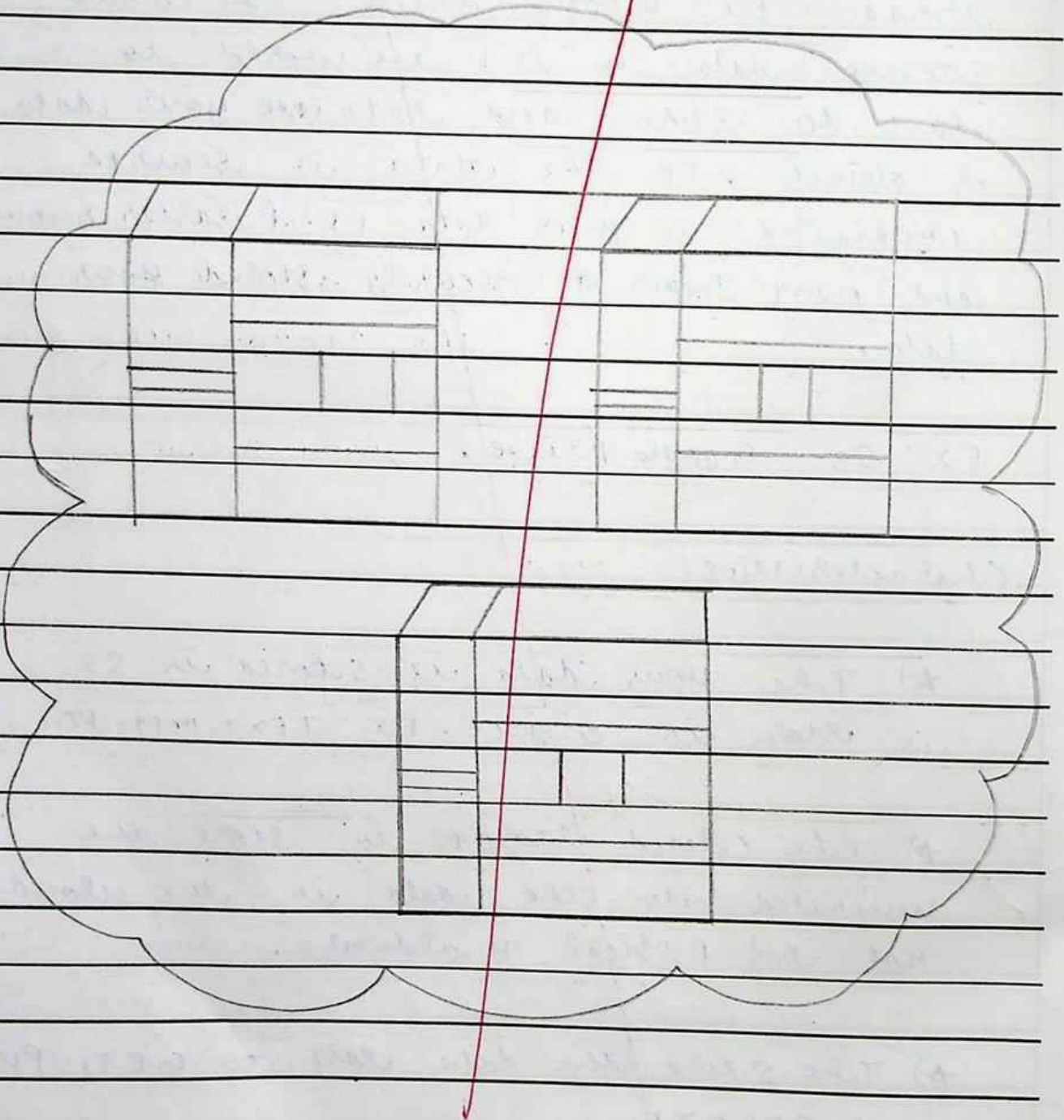
* The cloud storage to store the unlimited to the data in the cloud not for physical hardware.

* The store the data easy to GET, PUT and DELETE.



Diagram:

The working flow,





iii) Cloud Application:

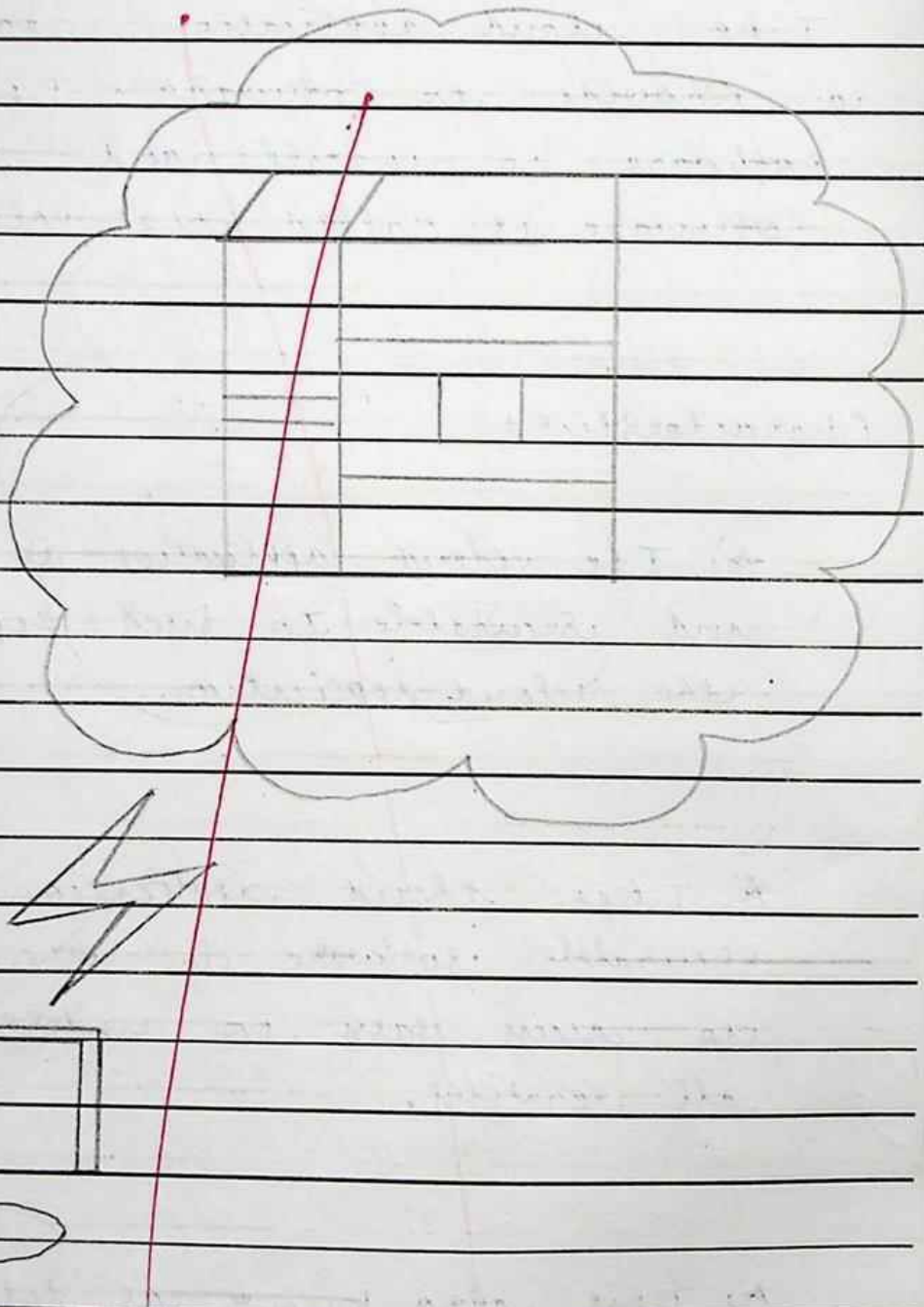
The cloud application working is to provide to software. Then the software is installed and run the software is called the cloud Application.

Characteristics:

- ★) The cloud application is used to easy and scalable to user experience in the cloud application.
- ★) Then cloud application is more scalable software in the Networking its access easy to understand the all services.
- ★) This also known as the cloud application its access in include security patch update and admin work.



Diagram:





12. (B) Discuss about the cloud deployment models.

The cloud deployment model is working in various cloud in the deployment model in the cloud.

There are four types of cloud deployment models.

i) Public cloud

ii) Private cloud

iii) Community cloud

iv) Hybrid cloud

i) Public cloud :

The public cloud is function of any type client to access the data. The data is stored in the cloud. Non-secureable.



Advantages :

★) Less cost

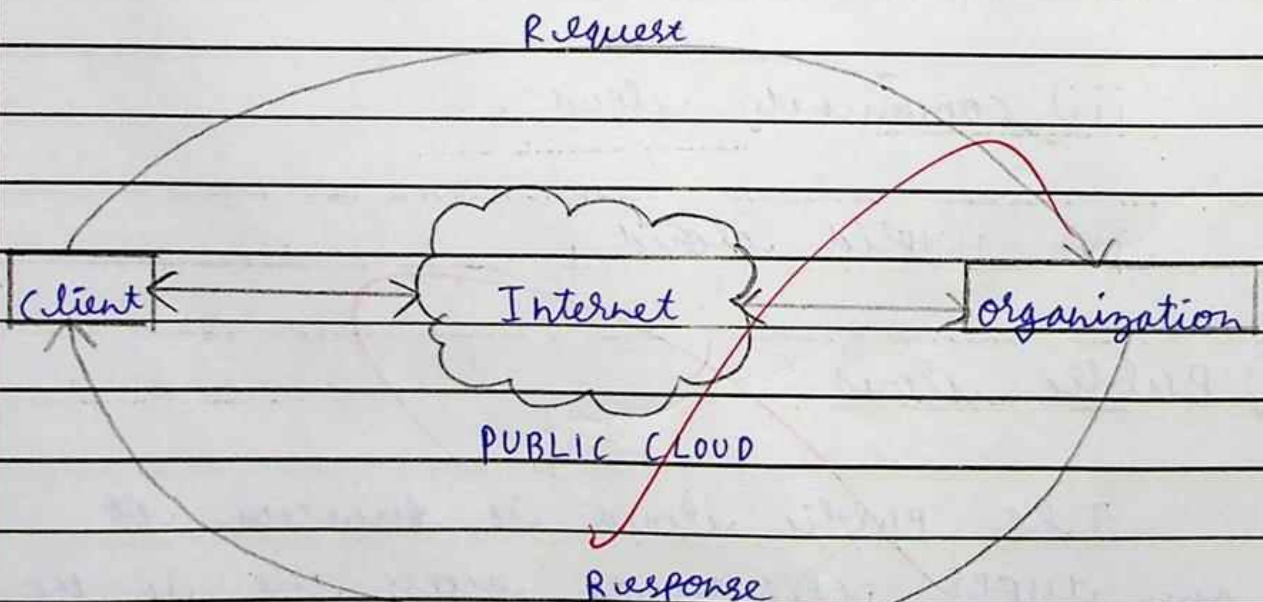
★) Easy to store

Disadvantages :

★) Easy to Hacked your data.

★) Non - Securable

Diagram :





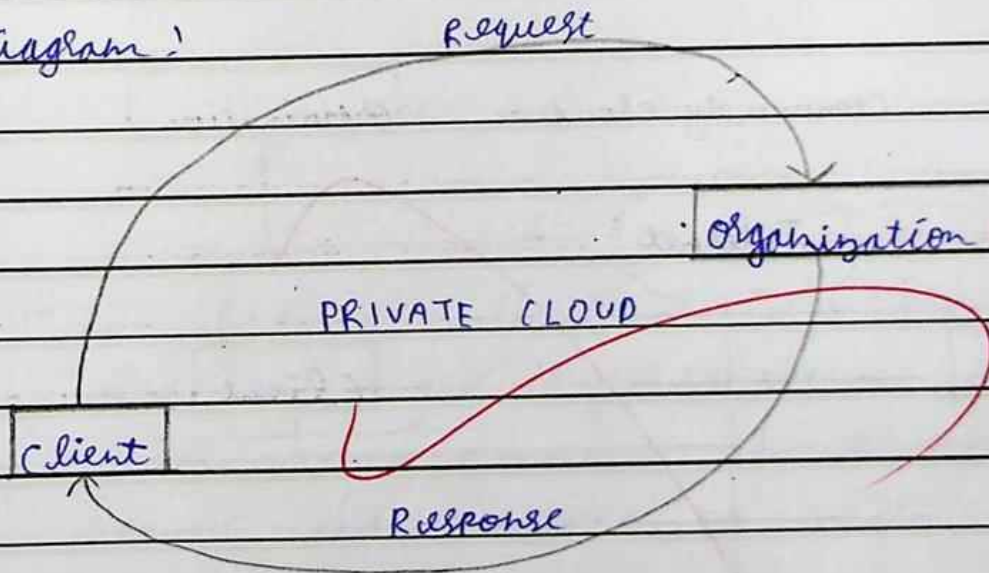
ii) Private cloud:

The private cloud is function at working in more securable to access in your data or communication. The not possible to access your data in hackers.

Advantages:

- ★) More securable in your data.
- ★) Not possible hacked your data.

Diagram:



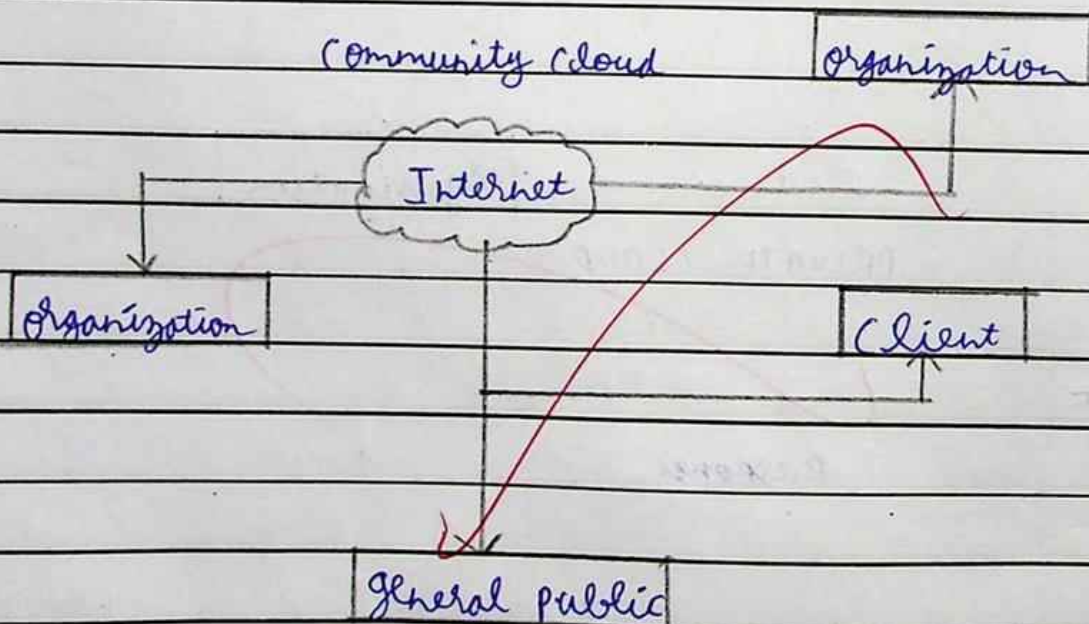


iii) Community cloud:

The community is working in two organisation access the communication to used in the community cloud to easy to data transfer the organization.

Advantages:

- * A) More shareable.
- * A) Easy to communicate.
- * A) Easy to transfer your data.





iv) Hybrid cloud;

The Hybrid cloud is working in include public cloud and private cloud in the the Hybrid cloud. The hybrid cloud is a only need go to public cloud but not in need going to public cloud.

Advantages :

★) Less cost

★) Scalable

★) Easy to communicate

The hybrid cloud a big organization used in the hybrid cloud - It's working in smart to configure in the cloud to request and response. To easily communicate in the client.



Diagram)





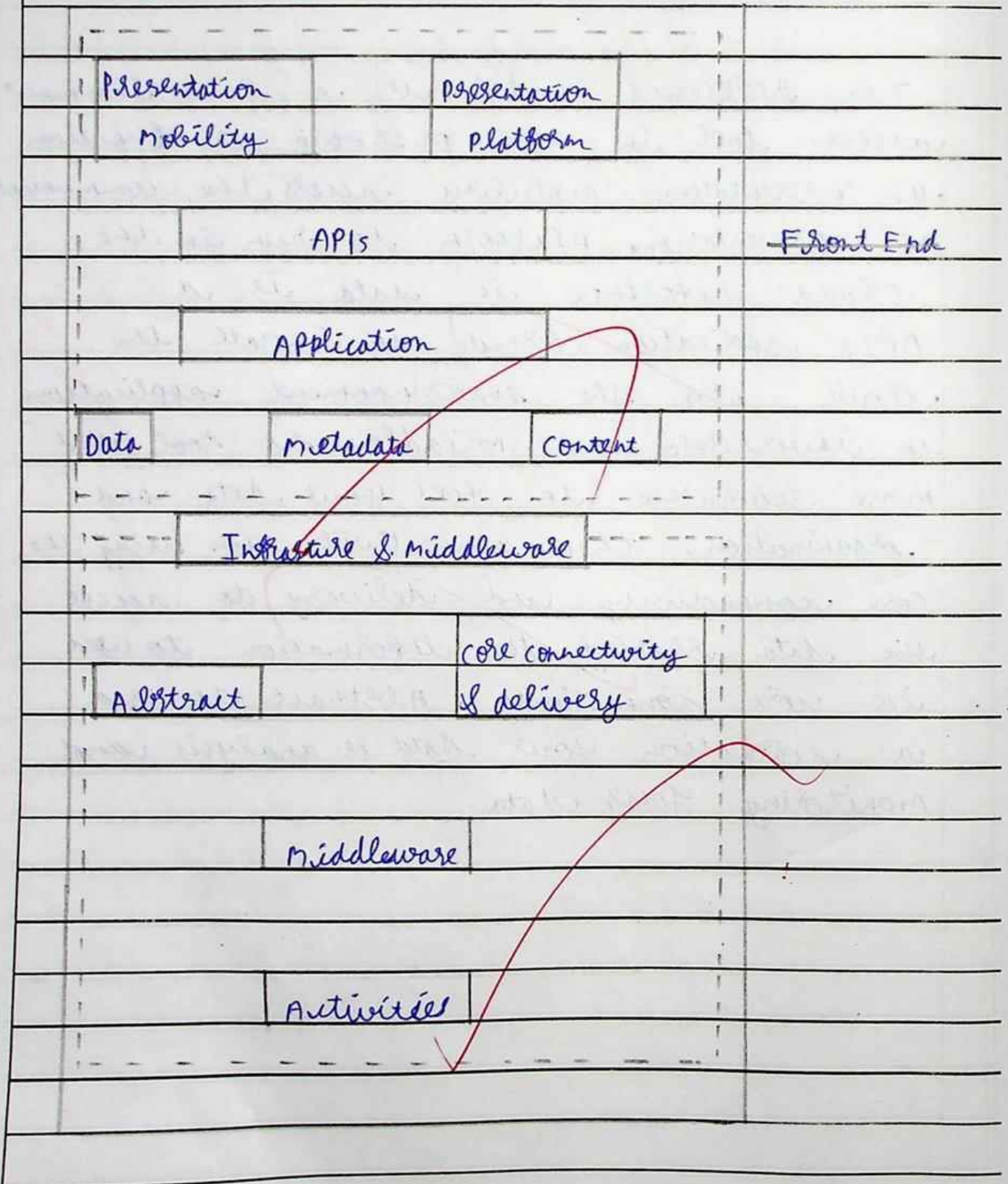
13. (B) Draw and explain about the CSA cloud reference model.

The reference model is a environment access tool in the network to function the presentation mobility access the communicate the presentation platform to run in the

cloud reference is data is a APIs application formats to install the cloud to the environment application to invertible and middleware tool used more sensible to feel your data and organization. Then connectivity you using the core connectivity and delivery to access the data sharing the information to used in more connectivity. Abstract to used in collection your data is analysis and monitoring your data.



Diagram:





The presentation mobility is the function of the data application from the data is used the presentation mobility function & various mobility. The presentation platform is a function is on server to provide your data is used in the presentation platform. Then APIs is application interface is software developing in APIs tools. The data is the is the amount of data is store in the cloud. And the metadata is function of mediate data.

11. (b) Discuss about cloud scenarios and webservices.

Continuation:
webservices:

The webservices is the webapplication provide in through internet. To access the internet protocol communication between the webservices. The webservices is use experience to the access the webservices.



There are two types of webservice:

i) SOAP - Simple object access protocol

ii) REST - Representation state transfer.

i) SOAP :

It is known as the simple object access protocol function XML format to working in the simple object access protocol.

Advantages:

* WA security

* Language and input

Disadvantages:

* Very slow

* Not permit .



ii) REST :

The Rest (Representation state transfer) is a working speed to transfer and viewing the internet. The Rest is easily communication in networking. Then working flow is JSON format working then easy to modify and understand in Representation state transfer.

Advantages:

★) very fast

★) It work SOAP

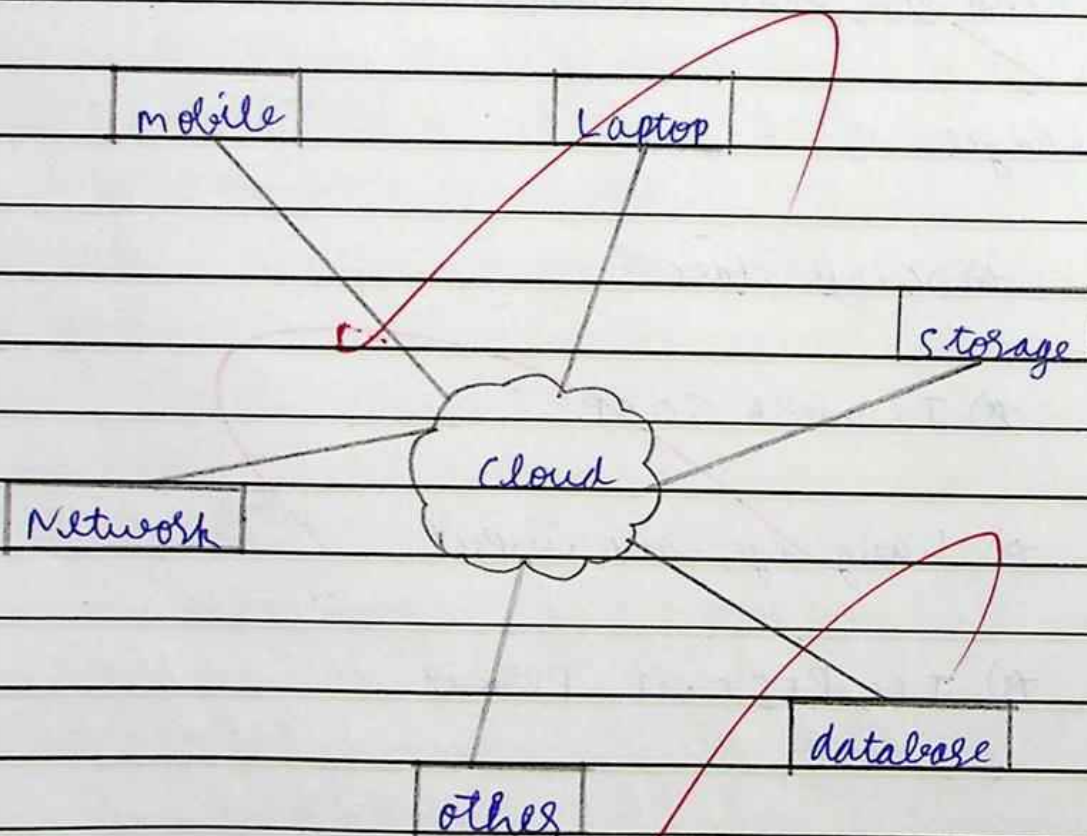
★) Language and input

★) The REST is permit



11. (a) (i)

The components of cloud in the client and infrastructure then internet. To access the internet communicate the data is called cloud. TS components mobile devices and database the many types services include in the cloud





11.(a) ii)

The essential characteristics of cloud computing is the provided on demand services provided in the cloud.

There are five types of essential characteristics.

- i) ON-demand self services.
 - ii) Location independent resource pooling
 - iii) Broad networking access
 - iv) Rapid elasticity
 - v) Measured service
- i) ON-demand self services:

The on-demand self services is any time services running EX: 24*7 to service provider is called on-demand self services.



ii) Location independent resource pooling:

The location independent resource pooling is function data transfer request and response to analysis or data is called the location independent resource pooling.

iii) Broad network access.

The broad network access is function of network connectivity to not delay or slow to analysis is called broad network access.

iv) Rapid elasticity:

The rapid elasticity is the increase or expand and decrease the data variable networking in the rapid elasticity in the cloud computing.



V) Measured services:

(1) The measured services is function of any time analysis data in cloud to data is fundamental variation methodology in the measured services.

12. (a) i)

Benefits of software as a services.

The software as a services no need to download and install and mainted no need in the application.

Ex:

(2) you install netflix and you can see though then you go to purchase subscription. Then benefits ad free. better quality and best user experience pay as you go method to run the software as a service.



12. (a) ii)

Cloud delivery model:

The cloud delivery model is different character in the cloud..

There are three types of cloud delivery model.

★ IaaS - Infrastructure as a service

★ PaaS - Platform as a service

★ SaaS - Software as a service

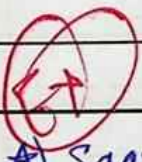
★ IaaS :-

The IaaS is a Infrastructure as a service. It provide a (virtual server) to used in the remote desktop its access in the virtual server.



* PaaS :-

The PaaS or a Platform as a Service is provided same as SaaS. The PaaS working software colligation working and software to operating system correct version support analysis and provide is called Platform as a service.



* SaaS :-

The SaaS is a Software as a Service is provide software patch work is a SaaS. The software update and next version software and analysis is work a Software as a service.



13. (a) Explain the cloud computing security challenges:

The security challenges is function method analysis uses experience in the cloud computing security challenges.

★ Centralize data

★ Reduce data loss

★ Monitoring

★ Instant Swap

★ Paying

★ Improved software security

★ Security Builds

★ Security testing



PART-A

1. Define cloud computing:

The cloud computing is a third party company provide in internet
ex: Amazon, Azure, Google.

The cloud computing is a virtualization is provided in internet server, network, Database, storage. To provide in cloud to working in Rent to access services pay as you go models.

2. The security in cloud computing:

* More secure

The security in cloud computing is more secure to access in the cloud you are on own network and storage and Database then store to your data secure in the cloud.



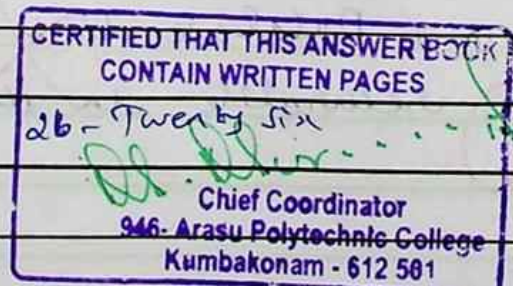
3. Platform as a service is provided in server include in software to access in the virtual server.

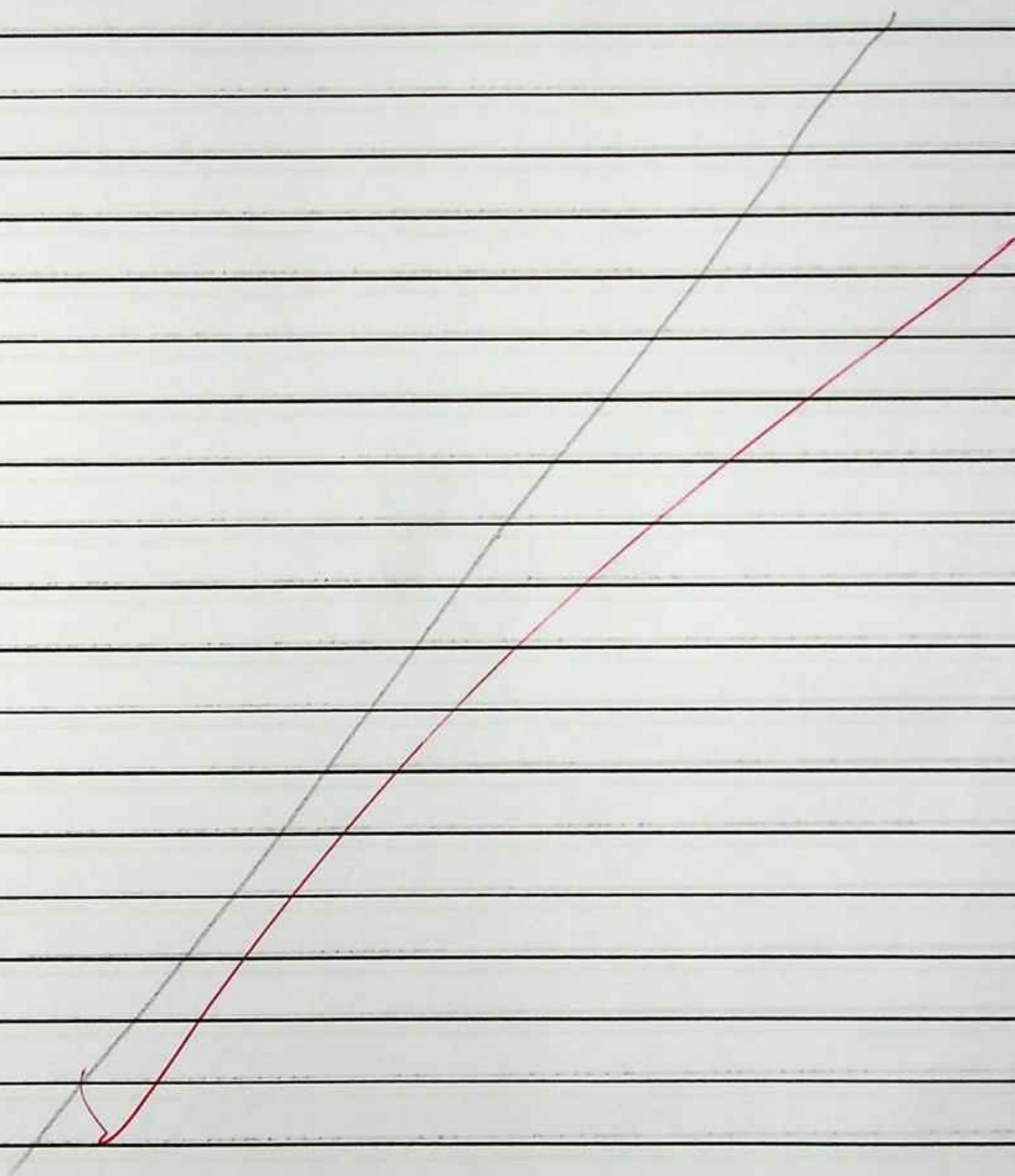
4. IaaS :

The IaaS is virtual server in the cloud is used to your physical computer remote desktop & software to access in the Infrastructure as a service.

EX) EC2 , Google App Engine

6. Virtualization security management is more securable your data in the cloud all time analysis your data in cloud no need to panic is security not possible to attack or attack your data.







This image shows a single sheet of white paper with horizontal blue or grey ruling lines. A diagonal line runs from the bottom left towards the top right, creating a narrow margin on the left side. The paper appears to be part of a notebook or a set of stationery. There are some faint smudges and shadows across the surface, suggesting it might be a scan of a physical document.

