Q1
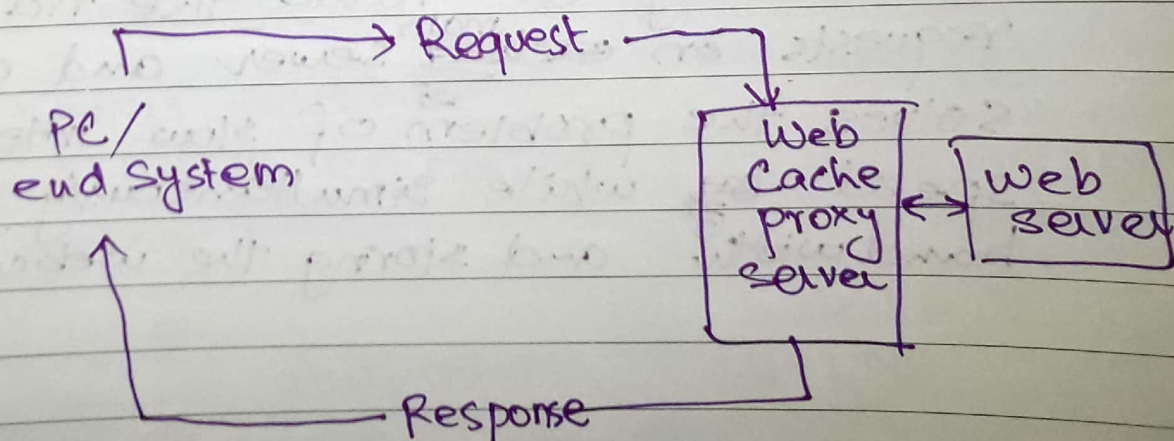
(A) (i) Solution to reduce response for web request.

"Web caching" can be solution to reduce the response time because it reduces the traffic on the access link and the response time for client request is also reduced due to cache.
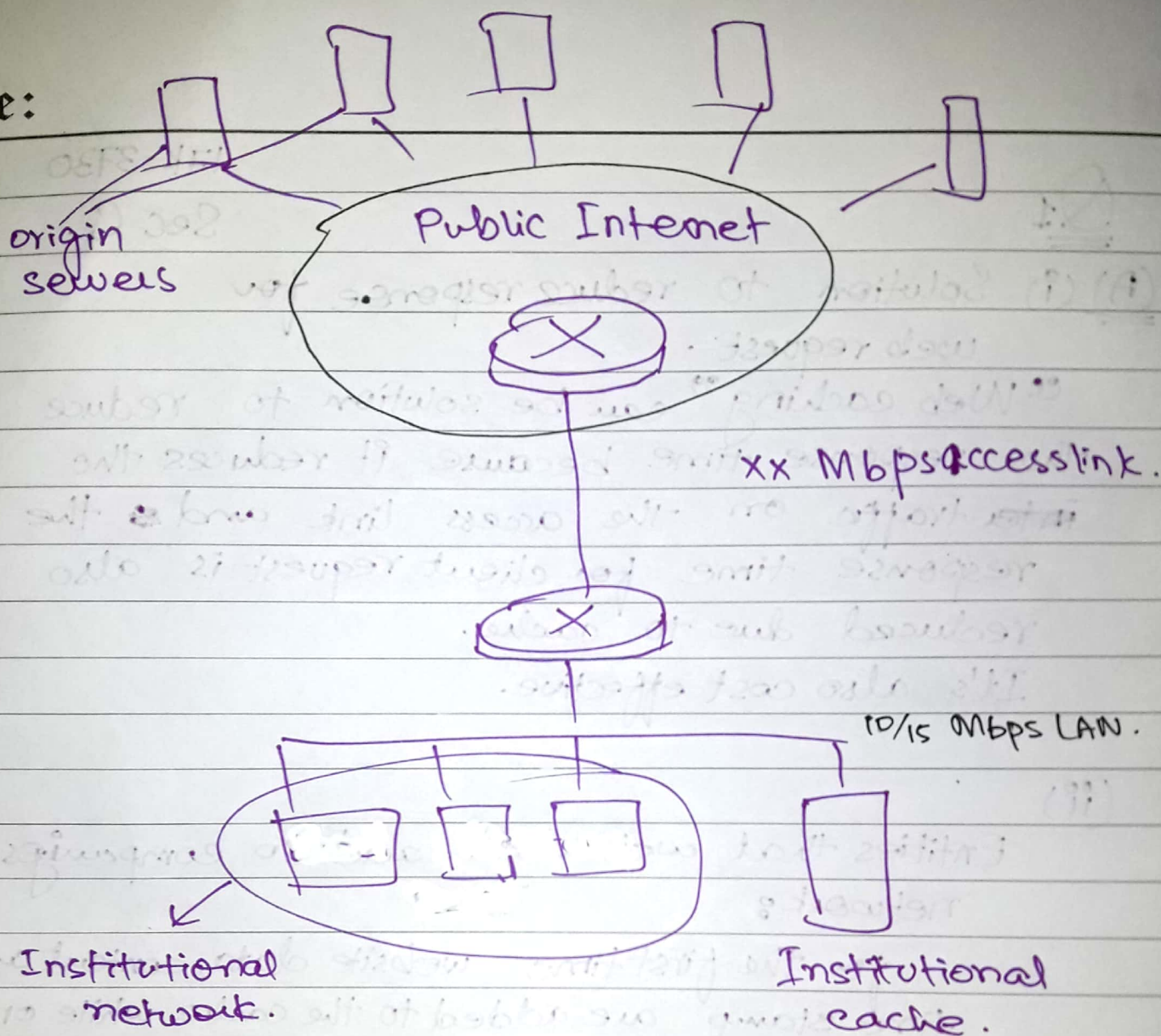
It's also cost effective.

(ii)

Entities that web cache add to companies network:

for the first time website data, content and time stamp are added to the cache while on the next time browser will check the time stamp and compare it with the previous one. if the timestamp is latest the site data is accessed.

Date:

origin
servers

Public Internet

xx Mbps access link.

10/15 Mbps LAN.

Institutional
network.

Institutional
cache.

Q1

(b) The web caching is significant for
large internet provider due to the fact
the caching can reduce the no. of
requests on ~~caching~~ main server and also
solves the problem of slow internet
speed ~~by~~ while simultaneously saving the
bandwidth and storing the web content.

Q_2 : (A) (i)

Load distribution among replicated Servers.

• DNS ~~should be~~ is suggested according to given scenario as it offers load distribution among replicated sewers and therefore many IP addresses corresponds to one name. The whole process is known as "DNS Serva load balancing"
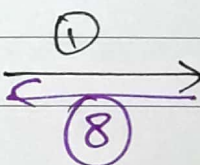
(ii) ~~ŧ€~~ The small name can be :
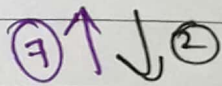(reply1.mehran.com.pk , MX , TTL)
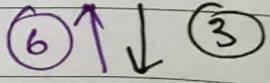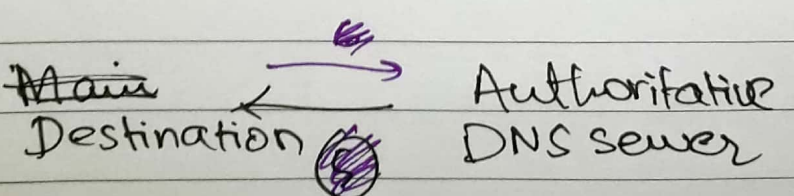↑   ~~Type :~~
~~Sewer name: reply1.mehr~~   mail exchange record from DNS.

(B) (iii)

requesting the host ①⟶ ⟵⑧ local DNS server

These sewers would be involved while accessing the website :

⑦↑↓② Goto the root DNS sewer

⑥↑↓③

⑤⟶ Authoritative ~~Main~~ ⟵ Destination ⟶ DNS sewer ⟵④ TLD DNS sewer

Date:

⊗ (i) The domain name has to be registered ~~to get access that to the~~ on a domain name server

DNS server is used along with web server to fulfil requirement.