**14. What are the RAC related background processes?**

**LMON**  –

* (Global Enqueue Service Monitor)  It manages global enqueue and resources.
* LMON detects the instance transitions and performs reconfiguration of GES and GCS resources.
* It usually do the job of dynamic remastering.

**LMD – >**

* referred to as the GES (Global Enqueue Service) daemon since its job is to manage the global enqueue and global resource access.
* LMD process also handles deadlock detection and remote enqueue requests.

**LCK0 -(Instance Lock Manager) >** This process manages non-cache fusion resource requests such as library and row cache requests.

**LMS – ( Global Cache Service process) – >**

* Its primary job is to transport blocks across the nodes for cache-fusion requests.
* GCS\_SERVER\_PROCESSES –> no of LMS processes specified in init. ora parameter.
* Increase this parameter if global cache is very high.

**ACMS:**

* Atomic Controlfile Memory Service.
* ensuring a distributed SGA memory update is either globally committed on success or globally aborted if a failure occurs.

**RMSn: Oracle RAC Management Processes (RMSn)**

It usually helps in creation of services, when a new instance is added.

**LMHB**

* Global Cache/Enqueue Service Heartbeat Monitor
* LMHB monitors the heartbeat of LMON, LMD, and LMSn processes to ensure they are running normally without blocking or spinning

**35. What are the role of CRSD,CSSD,CTSSD, EVMD, GPNPD**

**CRSD – Cluster ready service daemon** – It manages the cluster resources , based on OCR information. It includes start,stop and failover or resource. It monitors database instance, asm instance ,listeners, services and etc on and automatically restarts them when failure occurs.

**CSSD – > Cluster syncronization service** – It manages the cluster configuration like, which nodes are part of cluster etc. . When a node is added or deleted, it inform the same about this other nodes. It is also responsible for node eviction if situation occurs.

CSSD has 3 processes – >

the CSS daemon (ocssd),

the CSS Agent (cssdagent),  The cssdagent process monitors the cluster and provides input/output fencing.

the CSS Monitor (cssdmonitor) – Monitors internode cluster health

* **CTSSD – >** Provides time managment for cluster service. If ntp is running on server, then CTSS runs in observer mode.

* **EVMD – >** Event Manger ,  Is a background process that publishes Oracle Clusterware events  and manages message flow between the nodes and logs relevant information to log file.

* **oclskd -> Cluster Kill Daemon – >**Is used by CSS to reboot a node based on requests from other nodes in the cluster

* **Grid IPC daemon (gipcd):** Is a helper daemon for the communications infrastructure

* **Grid Plug and Play (GPNPD):** GPNPD provides access to the Grid Plug and Play profile, and coordinates updates to the profile among the nodes of the cluster to ensure that all of the nodes node have the most recent profile.

* **Multicast Domain Name Service (mDNS):** Grid Plug and Play uses the mDNS process to locate profiles in the cluster, as well as by GNS to perform name resolution.
* **Oracle Grid Naming Service (GNS):** Handles requests sent by external DNS servers, performing name resolution for names defined by the cluster.