**Maven Quiz Paper**

1)What is Maven ? What is your experience with it?

maven is project management build tool.Maven provides developers a complete build lifecycle framework.

2)What are the different tools that you have integrated Maven with?

generally maven is deeply integrated with git and jenkins and my artifactory repository and servers.

3)What are the steps that happen before a software projects deployment?

All the developers can chech their code into the their scm repository.

Download the complete source code from scm repository

.Build the application.

After the build process was completed it generate a war or jar or ear that depends on the application type .

then it will be stored in the third party repository just like nexus or archetype repository.

Get the file from network and deploy the file to the production site

4)What are the Advantages of maven over Ant ?

ant and maven both are build tools

maven has so many advantages over the ant. in ant every thing you have to define the templets and where the source code can be taken and where the artifact can be kept so target also you have to define but where as maven you just create a templets maven can handle the targets no need to give the targets by your self.

Ant scripts are not reusable – Maven plugins are reusable

5)What does it mean when you say Maven uses Convention over Configuration?

6)How do you know the version of mvn you are using?

mvn --version

7)List two most important files in your maven installation?

while installing the maven 2 files are importent those are maven setting files those are located at

where your maven was installed in your machine that is called settings.xml(inside conf folder)

users home directory ${ user.home }/ .m2 / settings.xml

8)What is POM? What does it contain? Explain in detail

POM is Project Object Model it is a It is an XML file which holds the information about the project and configuration details used to build a project by Maven. and it is automatically created by the maven you just and configure the details about your project structure.

it create a pom.xml files and inside this pom.xml files it generates the required dependencies and pluggins. based on the requirement it genarates the war or jar or ear files.

9)What is settings.xml ? What does it contain?

It containes all the settings which are used by maven while running the pom.xml files.

10)What is a goal in Maven terminology?

A goal represents a specific task which contributes to the building and managing of a project. It may be bound to zero or more build phases. A goal not bound to any build phase could be executed outside of the build lifecycle by direct invocation.

11)Explain what the following commands will do?

mvn clean:- it cleans the all previous builds and made a fresh build.

mvn test:- test the compiled source code using a suitable unit testing framework

mvn install:-install the package into the local maven repository, for use as a dependency in other projects locally.

mvn deploy:-done in an integration or release environment, copies the final package to the remote repository for sharing with other developers and projects.

12)What are the most important phases of a Maven Build Lifecycle?

validate − validate the project is correct and all necessary information is available.

compile − compile the source code of the project.

test − test the compiled source code using a suitable unit testing framework. These tests should not require the code be packaged or deployed

package − take the compiled code and package it in its distributable format, such as a JAR.

integration-test − process and deploy the package if necessary into an environment where integration tests can be run.

verify − run any checks to verify the package is valid and meets quality criteria.

install − install the package into the local repository, for use as a dependency in other projects locally.

13)What are Maven Profiles ? How do you use a specific profile?

14) What are Maven Plugins? List a few important maven plugins that you used?

(Must talk about maven release plugin)

Build plugins − They execute during the build and should be configured in the <build/> element of pom.xml

Reporting plugins − They execute during the site generation and they should be configured in the <reporting/> element of the pom.xml

15)How do you use plugins in Maven?

create jar file.

create war file.

compile code files.

unit testing of code

create project documentation.

create project reports.

16)What are dependencies in maven? How are they declared? How is transitive dependencies managed in Maven?

dependency scope is like maven depend on compile run test deploy.

transitive dependencie:-

ransitive dependency means to avoid needing to discover and specify the libraries that your own dependencies require, and including them automatically

17)What is difference between Dependency Management and Plugin Management in maven?

Dependency management is when you creating a archetype that archetype dependencys are come up with your pom.xml files for make builds.

pluggins that are for the archetype version include any pirtucular version then it will add those verions to complet the build.

18)how do you create properties in a maven pom ?

while genarating the archetype i will give a groupid archetype id and snapshot for my archetype it will genarate the archetype according to the requirement.

19)How would you if a given pom is parent pom or a child pom ?

parent pom have its own life cycle i.e. can it be released separately of the other modules

configures plugins that are actually referenced within the plugins element in the children

20)How would you use modules in maven? When do you create a module for your project?

21)What is the order of inheritence between following files:

settings file

company pom

project pom

child/ module pom

22)What is the difference between the aggregation and inheritence in Maven?

23) In your current/previous project, how did you guys manage application version strings ?

Talk about what mV versions:set -Dnewversion=X.X.X.X and maven release plugin