1. What is the purpose of the core module in AEM?  
Core modules contains the backend logic for handling the datas, processing them and other services. These are implemented using java code.

Core modules includes like Sling,servles,and OSGI services

Main purpose of core modules are : to handle API endpoints interaction,expose backend data through sling and define services that forms the business logic of the AEM components

2. What kind of files and code can be found in the core folder?

Java class files such as models ,services, filters, schedulers ,servlets etc.

XML files that contains configurations and dependencies

Testing files written in java using Junit

3. Explain the role of ui.apps in AEM projects.:

Stores content like components, templates, client libs, and static assets.

It provides the overall structure and presentation layers for AEM.

4. What are the different types of AEM modules (core, ui.apps, ui.content, etc.)?

Core –Sling Models, OSGi Services etc.

all: Aggregates packages for deployment.

ui.apps –front-end components, templates, clientlibs.

ui.content – Contains site-specific content

ui.tests – Used for testing

dispatcher – Used for caching and configurations for AEM Dispatcher.

5.How does Maven build these modules?

Modules built as OSGi bundles and content packages .

It also make use of pom.xml file to map the dependencies and intstall the necessary packages

6.Explain the build lifecycle of Maven in the context of AEM.

Compile the java code run the testing code and test the javacode then installation ,build and deploy

In brief: compile -> run -> test -> install -> build -> deploy

7.How are dependencies managed in pom.xml?

The required dependencies are mentioned in the pom.xml file

From which the maven automatically installs and update the dependencies(JAR files) based on the given metadatas

8.Why is Maven used instead of other build tools?

It make the process of installing the dependencies easier and standardised. It handles the bundles and packaging of OSGI Bundles

Command : mvn clean install or mvn clean install -PautoInstallPackage -Dmaven.test.skip=true

9.What advantages does Maven offer for AEM development?

Auto-deploys content packages to AEM and autoInstallBundle