5. Specifications of Web Services

Explain how service specifications are done in Web Services and the role of WSDL. Give examples.

Interface definitions are needed to allow clients to communicate with services.

For web services, interface definitions are provided as part of a more general service description, which specifies two other additional characteristics

– how the messages are to be communicated (for example, by SOAP over HTTP) and the URI of the service.

To cater for use in a multi-language environment, service descriptions are written in XML.

A service description forms the basis of an agreement between a client and a server as to the service on offer.

It assembles all of the facts concerning the service that are relevant to its clients.

Service descriptions are generally used to generate client stubs that automatically implement the correct behaviour for the client.  
Web server means pretty much that it speaks HTTP, and web client is anything that cab speaks HTTP

WSDL web service description language used by web services to describe the functionality of the service.

Some servers including glassfish automatically generated the WSDL

1 Service

Does not says much, it says that there is a binding and there is the location.

So service is mostly defending the end point

2 Binding has the operations that I have in the interface,

It transports using Http

And the style is RPC, and each operation uses literal to communicate back and forward

So, binding is technical stuff like protocol, and here is the style RPC, and finally the uses which might be encoded or literal

3. port type: it defines the operation

it says that each of the operations has an input and an output (so what is the request and what is the response)

So, this is the most important part, which makes the one understands what this particular web service is about what are the operations.

4. Message: messages exchanged between the client and service, with argument mappings

5.Type This defines the classes used in the parameters (complex type)