## Section A: Session beans

**Q 1**. Name one difference between a session bean and a message bean.

**Q2**. List four actions typically implemented in a session bean:

i) iii)

ii) iv)

**Q3** Give a one sentence description that highlights the difference between each of the three types of session bean:

i) Stateless session bean:

ii) Stateful session bean:

iii) Singleton session bean:

**Q4**. Give <u>three</u> properties of a stateful session bean:

i)

ii)

iii)

**Q5**. Give <u>three</u> properties of a stateless session bean:

i)

ii)

iii)

**Q6**. Give <u>two</u> properties of a singleton session bean, and one example of where you might use a singleton session bean:

i)

ii)

Example:

## Section B: Accessing a Session bean

**Q7**: Give a one sentence description that highlights the difference between each of the following methods for accessing a session beans:

i) No interface

ii) Local interface

iii) Remote interface

iv) Web service

**Section C: Services available to a session bean**

**Q8.** Give two differences between the following ways to code access to a resource in an EJB container:

i) JNDI

ii) Dependency injection

**Q9**. Explain the following call to the timer service:

@schedule (hour="12/6", dayOfMonth="4th Fri")
public void sampleDataset()

**Section D: Session Bean Life Cycle**

**Q10**. Explain the <u>two</u> states of a stateless session beans life cycle.

i)

ii)

**Q11**: Explain the <u>three</u> states of a stateful session bean's life cycle.

i)

ii)

iii)

**Section E: Message beans**

**Q12**. Give an example of when you might use a **message** bean.

**Q13**. Explain the role of the ***onMessage*** method in a message bean:

i) How is the method called, and by whom?

ii) What services can it avail of?