Java Interface and Abstract Class

Q 1 : What is Abstract class ?

Ans : A class that is declared using "**abstract**" keyword is known as abstract class. It can have abstract methods(methods without body) as well as concrete methods (regular methods with body). A normal class(non-abstract class) cannot have abstract methods.
Source :https://beginnersbook.com/2013/05/java-abstract-class-method/

Q 2 : Can Interface be extended by another Interface ?

Ans : Yes , she(!) can , extends by Interface but Implemented by a class .
[why she ! cause I think it contains a child]
Source : https://www.tutorialspoint.com/java/java_interfaces.htm

Q 3 : Different between Abstract and Interface .

Ans :

	Abstract Class	**Interface**
1	An abstract class can extend only one class or one abstract class at a time	An interface can extend any number of interfaces at a time
2	An abstract class can extend another concrete (regular) class or abstract class	An interface can only extend another interface
3	An abstract class can have both abstract and concrete methods	An interface can have only abstract methods
4	In abstract class keyword "abstract" is mandatory to declare a method as an abstract	In an interface keyword "abstract" is optional to declare a method as an abstract
5	An abstract class can have protected and public abstract methods	An interface can have only have public abstract methods
6	An abstract class can have static, final or static final variable with any access specifier	interface can only have public static final (constant) variable
7	An abstract class can have constractor .	Interface can not

Source :https://beginnersbook.com/2013/05/abstract-class-vs-interface-in-java/

Characteristic	**interface**	**abstract class**	**class**
Can `extend` one or more interfaces	yes	no	no
Can `extend` a single class	no	yes	yes
Can `implement` one or more interfaces			
Can have method signatures without bodies	yes	yes	no
Can have method implementations with bodies	no	yes	yes
Can be `protected` or `private`			
Can have `protected` or `private` members			
Can have constructors			
Can have `sta`tic methods			
Can have `static` fields (other than `public final` ones)			
Can have `public static final` fields	yes	yes	yes

Source : https://www.ics.uci.edu/~alspaugh/cls/shr/java-type.html

Q 4:What is Concrete Class ?

Ans : A concrete class is the class that has the implentaion of an interface. A concrete subclass on the other hand has the implementation of an abstract superclass that is extended.
Source :https://www.javatpoint.com/q/4106/what-is-concrete-class-and-base-class-and-derived-class-?

Q 5 : What is marker Interface ?

Ans :It is an empty interface (no field or methods). Examples of marker interface are Serializable, Clonnable and Remote interface. All these interfaces are empty interfaces.
Source : https://www.geeksforgeeks.org/marker-interface-java/

Q 6 : Why doesn't Abstract modifier use in Interface ?

Ans : Every interface is implicitly abstract. This modifier is obsolete and should not be used in new programs.
Source : https://stackoverflow.com/questions/2134200/why-declare-an-interface-as-abstract

Q 7: What kind of types is Interface .

Ans : Reference Type .
Source : https://stackoverflow.com/questions/7275844/interface-as-a-type-in-java

Q 8:If an abstract method declared in a non_abstract class ,what happened ?

Ans : compile time error . The declaration of abstract method should have a abstract class .
Source :https://www.javatpoint.com/abstract-class-in-java

Q 9 : What is multiple Interface ?

Ans : If a class implements multiple interfaces, or an interface extends multiple interfaces i.e. known as multiple inheritance.
Source : https://www.javatpoint.com/interface-in-java

Q 10 :What is Third Rule ?

Ans :
Source : https://stackoverflow.com/questions/16329973/super-constructor-within-a-subclass-that-extends-a-subclass

Q 11 :Can abstract class have a final method ?

Ans : NO .
Source : https://stackoverflow.com/questions/1299398/can-an-abstract-class-have-a-final-method

Q 12 : Can abstract class have a Constractor ?

Ans :Yes, but interface can't .
source :https://stackoverflow.com/questions/260666/can-an-abstract-class-have-a-constructor

Q 13 : Can Interface class be declared as final ?

Ans :No , because when the final keyword appears in a class declaration, it means that the class may never be sub-classed or overridden. This prevents over-specialization of a particular class.
Source :https://stackoverflow.com/questions/12351646/why-interface-cannot-be-final

Q 14 : What feature should have on a subclass of an abstract class ?

Ans : Implementation of all the abstract method.

Q 15 : Describe the types of Interface ?

Ans : a) Marker Interface

Source :https://www.geeksforgeeks.org/marker-interface-java/

b) Functional Interface

Source : https://stackoverflow.com/questions/36881826/what-is-use-of-functional-interface-in-java-8/36882003

c) Multiple Interface

Source : https://www.javatpoint.com/interface-in-java