

Review

R1

“You can know the name of a bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird... So let's look at the bird and see what it's doing -- that's what counts. I learned very early the difference between knowing the name of something and knowing something.”

Richard Feynman

Java

J1	Imperative programming, standard library, types	Q1	J10	Integer etc., autoboxing, Math, Random	
J2	Types, objects, classes, inheritance, interfaces	Q2	J11	Character and String	Q1
J3	Naming, literals, primitives	Q1,Q2	J12	Generics	Q1
J4	Arrays, operators, expressions, statements, blocks	Q1,Q2	J13	Type inference	Q1,Q2 Q3,Q4
J5	if-then-else, switch	Q1,Q2	J14	Collections and sorting	Q4
J6	while, do-while, for	Q1,Q2	J15	Java exceptions, catch or specify, Java syntax	Q4
J7	parameters, return values	Q1,Q2	J16	Threads	Q5
J8	Nested classes	Q2			

Software Engineering

S1	IDEs, revision control, Gitlab and Git	Q2
S2	Revision Control	Q2
S3	Test Driven Development	Q1,Q2

Object Oriented Programming

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|----|--|-------|
| O1 | Class declaration, object creation | Q1,Q2 |
| O2 | Initializers, access control, nested classes, enum types | Q2 |
| O3 | Interfaces | Q2 |
| O4 | Inheritance, overriding, polymorphism, super | Q2,Q4 |
| O5 | java.lang.Object, final, abstract | |

Java FX

JavaFX **not examinable** in main exam (*but may arise in supplementary exam in the context of questions about your assignment*)

Abstract Data Types (ADTs)

A1	List implementation 1	Q1,Q2,Q4,Q5
A2	List implementation 2	Q1,Q2,Q4,Q5
A3	The set ADT and its implementation	Q2,Q5
A4	Hash tables	
A5	The tree ADT	Q2
A6	Map ADT implementation, ADT recap	Q2

Core Computer Science

C1	Recursion	Q1
C2	Hash functions, choosing a good hash function	Q2
C3	Hashing applications, Java's hashCode()	
C4	Files	
C5	Computational Complexity	Q2,Q5
C6	Grammars	Q5
C7	Threads	Q5