

Task (B): Test Case Design Sheet – ProductStock

Test Case ID	Method / Feature	Preconditions	Input(s)	Expected Result	Type
TC-01	Constructor	None	Valid parameters	Object created successfully	Normal
TC-02	Constructor	None	Negative stock	Exception thrown	Error
TC-03	addStock	Stock=50, Capacity=100	amount=10	Stock increased correctly	Normal
TC-04	addStock	Stock=95, Capacity=100	amount=10	Exception (capacity exceeded)	Boundary
TC-05	addStock	Stock=50	amount=0	Exception thrown	Error
TC-06	reserve	Stock=20	amount=5	Stock reserved successfully	Normal
TC-07	reserve	Stock=5	amount=10	Exception thrown	Error
TC-08	releaseReservation	Reserved=10	amount=5	Reserved stock released	Normal
TC-09	shipReserved	Reserved=10	amount=5	Reserved stock shipped	Normal
TC-10	shipReserved	Reserved=3	amount=5	Exception thrown	Error
TC-11	removeDamaged	Stock=10	amount=3	Damaged stock removed	Normal
TC-12	removeDamaged	Stock=5	amount=10	Exception thrown	Error
TC-13	isReorderNeeded	Stock=5, Threshold=10	-	Returns true	Boundary
TC-14	updateReorderThreshold	Stock=50	newThreshold=20	Threshold updated	Normal
TC-15	updateMaxCapacity	Capacity=100	newCapacity=200	Capacity updated	Normal
TC-16	Future Feature	-	-	Test skipped (not implemented)	Disabled