

Q1. Simple Object Context

```
const laptop = {  
  brand: "Dell",  
  getBrand: function() {  
    return this.brand;  
  }  
};  
const myBrand = laptop.getBrand();  
console.log(myBrand);
```

Q2. Basic Promise Flow

```
console.log(1);  
Promise.resolve().then(() => {  
  console.log(2);  
});  
console.log(3);
```

Q3. The Broken Chain

```
Promise.reject("Error Occurred")  
  .then(() => console.log("Success"))  
  .catch((err) => console.log(err));
```

Q4. Global vs. Local Scope

```
var status = "Offline";  
  
const server = {  
  status: "Online",  
  getStatus: function() {  
    return this.status;  
  }  
};  
  
console.log(server.getStatus());
```

Q5. Math in Promises

```
Promise.resolve(10)
  .then((num) => num * 2)
  .then((result) => console.log(result));
```

Q6. The "Lost" Context

```
const user = {
  name: "Alex",
  printName() {
    console.log(this.name);
  }
};
```

```
const print = user.printName;
print();
```

Q7. Event Loop Basic Race

```
console.log("Start");

setTimeout(() => console.log("Timeout"), 0);

Promise.resolve().then(() => console.log("Promise"));

console.log("End");
```

Q8. Arrow Function Pitfall

```
const group = {
  title: "Developers",
  getTitle: () => {
    console.log(this.title);
  }
};
```

```
group.getTitle();
```

Q9. Chaining Returns

```
Promise.resolve(5)
  .then((val) => {
    console.log(val);
    return val + 5;
  })
  .then((val) => console.log(val));
```

Q10. Catch and Continue

```
Promise.reject("Fail")
  .catch((err) => {
    console.log(err);
    return "Recovered";
  })
  .then((res) => console.log(res));
```

Q11. The Nested Timeout

```
console.log('A');

setTimeout(() => {
  console.log('B');
}, 0);

Promise.resolve().then(() => {
  console.log('C');
  Promise.resolve().then(() => console.log('D'));
});

console.log('E');
```

Q12. Explicit Binding (Call/Apply)

```
const agent = {
  id: 101
};
```

```
function showId() {  
  console.log(this.id);  
}
```

```
showId.call(agent);  
showId.apply(null);
```

Q13. Promise.all Failure

```
Promise.all([  
  Promise.resolve("Success 1"),  
  Promise.reject("Error 1"),  
  Promise.resolve("Success 2")  
)  
.then(res => console.log("Result:", res))  
.catch(err => console.log("Caught:", err));
```

Q14. The "Callback" Context Trap

```
const player = {  
  score: 50,  
  updateScore() {  
    setTimeout(function() {  
      console.log(this.score);  
    }, 100);  
  }  
};
```

```
player.updateScore();
```

Q15. Throwing Inside a Chain

```
Promise.resolve(1)  
.then(x => {  
  throw new Error("Invalid");  
})  
.catch(err => {  
  console.log("Caught Error");  
});
```

```
    return 10;
  })
  .then(x => console.log(x));
```

Q16. Async Function Order

```
async function foo() {
  console.log("A");
  await Promise.resolve();
  console.log("B");
}
```

```
console.log("C");
foo();
console.log("D");
```

Q17. The "Finally" Gotcha

```
Promise.resolve("Done")
  .finally(() => {
    console.log("Cleanup");
    return "Modified?";
  })
  .then(res => console.log(res));
```

Q18. Variable Hoisting & Promises

```
console.log(a);
var a = 5;

Promise.resolve().then(() => {
  console.log(a);
});

a = 10;
```

Q19. Microtask vs Macrotask Interleaving

```
setTimeout(() => console.log("T1"), 0);
```

```
Promise.resolve().then(() => {  
  console.log("P1");  
  setTimeout(() => console.log("T2"), 0);  
});
```

```
Promise.resolve().then(() => console.log("P2"));
```

```
console.log("End");
```

Q20. Object Method Assigned to Class

```
class Manager {  
  constructor(name) {  
    this.name = name;  
  }  
  
  print = () => {  
    console.log(this.name);  
  }  
}
```

```
const m = new Manager("Sarah");  
const p = m.print;  
p();
```