Problem 1:

1. Timer Queue – Handle callback like setTimeout and setInterval
2. I/O Queue – Handle network and database operation
3. Task Queue – Handle SetImmediate
4. NextTick Queue – Handle process.nextTick
5. Promise Queue – Handle promise

Problem 2

Answer

Start

End

nextTick 2

nextTick 1

Promise…2

Promise…1

Timeout 3

Timeout 2

nextTick 3

timeout 1

problem 3:

Answer

Timeout

readfile…

Immediate

Event loop will go in order timer -> I/O queue -> Task Queue

Problem 4:

In node we have the function wrapped with a function so it will a object now the keyword ‘this’ point to the scope and not able to find ‘message’ so it will console ‘undefined’.

In browser the ‘message’ variable declares in windows and in the function keyword ‘this’ is window so it will print ‘Hello World’.

Problem 5:

Answer: It will return error   
err: getName is not a function   
explanation: module.exports will return { getName:fn }. So, getName in app.js is not a function it’s an object you need to change getName.getName(); then it will work

Problem 6:

Answer: Josh Edward  
Explanation:

The code will run and console “Josh Edward” because module.export is a function.

Problem 7:

Answer: Josh Edward

In this code module.export is {getFullname:fn} and in app.js we are getting getFullname from a object using its keyword getFullname.

Problem 8:

Answer:

{firstname: 'John', lastname: 'Smith'}