

LINE 2 generates compilation error because instance variable basePower cannot be accessed in class Cooler.

6406532774925. ✓ LINE 3 generates compilation error because a variable of type Appliance cannot refer to an object of type Cooler.

6406532774926. ✗ LINE 4 generates compilation error because a variable of type Cooler cannot refer to an object of type Appliance.

AppDev2

Section Id :	64065359214
Section Number :	7
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	17
Number of Questions to be attempted :	17
Section Marks :	50
Display Number Panel :	Yes
Section Negative Marks :	0
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	No
Section Maximum Duration :	0
Section Minimum Duration :	0
Section Time In :	Minutes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	640653122743
Question Shuffling Allowed :	No

Question Number : 99 Question Id : 640653825092 Question Type : MCQ

Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "DIPLOMA LEVEL : MODERN APPLICATION DEVELOPMENT II (COMPUTER BASED EXAM)"

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CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE [TOP](#) FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406532774939. ✓ YES

6406532774940. ✗ NO

Sub-Section Number :

2

Sub-Section Id :

640653122744

Question Shuffling Allowed :

Yes

Question Number : 100 Question Id : 640653825093 Question Type : MCQ

Correct Marks : 2

Question Label : Multiple Choice Question

Which of the following methods is not a valid DOM method in JavaScript?

Options :

6406532774941. ✗ getElementById()

6406532774942. ✓ getElementByPropertyName()

6406532774943. ✗ getElementsByTagName()

6406532774944. ✗ getElementByClassName()

Question Number : 101 Question Id : 640653825096 Question Type : MCQ

Correct Marks : 2

Question Label : Multiple Choice Question

What will be the output of the following code snippet?

```
let result = "";
for (let i = 0; i < 3; i++) {
  for (let j = 0; j < 2; j++) {
    result += " " + i + j + " ";
  }
}
console.log(result);
```

Options :

6406532774954. ✗ 0 1 1 2 2 3

6406532774955. ✗ 0 1 1 2 2 3 3 4

6406532774956. ✖ 0 1 2 3 4 5

6406532774957. ✔ 00 01 10 11 20 21

Question Number : 102 Question Id : 640653825099 Question Type : MCQ

Correct Marks : 2

Question Label : Multiple Choice Question

Which of the following statements best describes the ephemeral state?

Options :

6406532774968. ✖ Data that persists across browser sessions.

6406532774969. ✖ Data that is stored in a server-side database.

6406532774970. ✔ Temporary data that is not preserved across re-renders.

6406532774971. ✖ Data that is cached in the client's browser.

Question Number : 103 Question Id : 640653825101 Question Type : MCQ

Correct Marks : 2

Question Label : Multiple Choice Question

What is the difference between v-bind and v-model directives in Vue.js?

Options :

6406532774976. ✔ "v-bind" is used for one-way data binding, while "v-model" is used for two-way data binding.

6406532774977. ✖ "v-bind" is used for two-way data binding, while "v-model" is used for one-way data binding.

6406532774978. ✖ Both "v-bind" and "v-model" are used for one-way data binding.

6406532774979. ✖ Both "v-bind" and "v-model" are used for two-way data binding.

Sub-Section Number : 3

Sub-Section Id : 640653122745

Question Shuffling Allowed : Yes

Question Number : 104 Question Id : 640653825094 Question Type : MCQ

Correct Marks : 3

Question Label : Multiple Choice Question

What will be the output of the following JavaScript code?

```
let x = undefined;
let y = null;
let z = NaN;
console.log(x == y, x === y, y == z, y === z, isNaN(z));
```

Options :

6406532774945. ✖ true false false true false

6406532774946. ✖ false false false false true

6406532774947. ✔ true false false false true

6406532774948. ✖ false true true false false

Question Number : 105 Question Id : 640653825095 Question Type : MCQ

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the below JavaScript program.

```
const a = 15;

const obj1 = {
  a: 20,
  b: function () {
    console.log(this.a);
    this.b();
  }
}

const obj2 = {
  a: 10,
  b: () => {
    console.log(this.a);
  }
}

obj1.b.apply(obj2);
```

What will be the output of the above program, if executed?

Options :

20

6406532774949. ✖ 20

20

6406532774950. ✖ undefined

6406532774951. ✖

undefined
undefined

10

6406532774952. ✓ undefined

6406532774953. ✖ The program will crash due to maximum call stack size exceeded error.

Question Number : 106 Question Id : 640653825097 Question Type : MCQ

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the below JavaScript program.

```
let users = [  
  { name: "Alice", age: 25 },  
  { name: "Bob", age: 22 },  
  { name: "Charlie", age: 30 },  
];  
users.sort((a, b) => a.age - b.age);  
console.log(users.map((user) => user.name).join(", "));
```

What will be the output when the code is executed?

Options :

6406532774958. ✖ Alice, Bob, Charlie

6406532774959. ✓ Bob, Alice, Charlie

6406532774960. ✖ Charlie, Alice, Bob

6406532774961. ✖ Charlie, Bob, Alice

Question Number : 107 Question Id : 640653825098 Question Type : MCQ

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the below javascript program.

```
const words = ['apple', 'banana', 'orange', 'grape', 'kiwi'];  
const result = words.map(word => word.length).filter(len => len > 5);  
console.log(result);
```

What will be the output of the above program, if executed?

Options :

6406532774962. ✖ ['apple', 'banana', 'orange', 'grape', 'kiwi']

6406532774963. ✖ [5, 6, 6, 5, 4]

6406532774964. ✖ ['banana', 'orange']

6406532774965. ✔ [6, 6]

6406532774966. ✖ [5, 5]

6406532774967. ✖ [true, true]

Question Number : 108 Question Id : 640653825100 Question Type : MCQ

Correct Marks : 3

Question Label : Multiple Choice Question

What is state management in the context of a web application?

Options :

6406532774972. ✖ Organizing and storing data on the server-side database.

6406532774973. ✔ Handling and updating the state of client-side components and data.

6406532774974. ✖ Managing user session data using browser cookies.

6406532774975. ✖ Coordinating the state of HTTP requests and responses between client and server.

Question Number : 109 Question Id : 640653825102 Question Type : MCQ

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the following JavaScript program.

```
const obj1={
  age: 29,
  toy: 'kite'
}

const obj2={
  __proto__: obj1,
  animal: 'dogs',
  members: 45
}

console.log(obj1.toy)
console.log(obj1.animal)
console.log(obj2.age)
console.log(obj2.members)
console.log(Object.keys(obj2))
```

What will be the output of the above program, if executed?

Options :

```
kite
undefined
29
45
['animal', 'members', 'age', 'toy']
```

6406532774980. ✖

```
kite
dogs
undefined
45
['age', 'toy', 'animal', 'members']
```

6406532774981. ✖

```
kite
dogs
undefined
45
['age', 'toy']
```

6406532774982. ✖

6406532774983. ✔

```
kite
undefined
29
45
['animal', 'members']
```

Question Number : 110 Question Id : 640653825107 Question Type : MCQ

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the following html.

```
<div id="app">
  <p>{{ message }}</p>
  <button @click="updateMessage">Click me</button>
</div>

<script>
new Vue({
  el: '#app',
  data: {
    message: 'Hello!'
  },
  methods: {
    updateMessage() {
      this.message += '!';
    }
  }
});
</script>
```

Assuming vue cdn has been added to the html and the html format is correct. What would be the output on the screen after clicking the button twice?

Options :

6406532775000. ✖ Hello

6406532775001. ✖ Hello!

6406532775002. ✖ Hello!!

6406532775003. ✔ Hello!!!

Sub-Section Number :

4

Sub-Section Id :

640653122746

Question Shuffling Allowed :

Yes

Question Number : 111 Question Id : 640653825103 Question Type : MSQ

Correct Marks : 3 Max. Selectable Options : 0

Question Label : Multiple Select Question

Which of the following is/are correct definition(s) of an arrow function that accepts a number and returns its square?

Options :

6406532774984. ✖ `let func = (num) => return num1*num1;`

6406532774985. ✖ `let func = (num) => { num1*num1; }`

6406532774986. ✔ `let func = (num) => num1*num1;`

6406532774987. ✔ `let func = (num) => { return num1*num1; }`

Sub-Section Number :

5

Sub-Section Id :

640653122747

Question Shuffling Allowed :

Yes

Question Number : 112 Question Id : 640653825104 Question Type : MCQ

Correct Marks : 4.5

Question Label : Multiple Choice Question

Consider the following JavaScript code embedded in the body of the HTML document given below.

```
<html>
<body>
  <div id="mybox">Test JS</div>
  <script>
    let count = 0;
    let change = setInterval(()=>{
      let box = document.getElementById('mybox');
      if(count % 2 == 1){
        box.style.backgroundColor = 'red';
        count++;
      }
      else if(count % 3 == 1){
        box.style.backgroundColor = 'green';
        count++;
      }
      else{
        box.style.backgroundColor = 'yellow';
        count++;
      }
    }, 1000)
  </script>
</body>
</html>
```

If the document is rendered on the browser, what will be the sequence of background colors taken by the element with id="mybox" in the first 6 seconds of execution?

Options :

6406532774988. ✖ Red → Green → Yellow → Red → Green → Yellow

6406532774989. ✖ Red → Green → Red → Yellow → Red → Yellow

6406532774990. ✖ Yellow → Green → Yellow → Green → Yellow → Green

6406532774991. ✔ Yellow → Red → Yellow → Red → Green → Red

Question Number : 113 Question Id : 640653825105 Question Type : MCQ

Correct Marks : 4.5

Question Label : Multiple Choice Question

Consider the below JavaScript program.

```
class Region{
  constructor(region){
    this.region = region;
  }
  get describe(){
    return `${this.region} is one of the major geographical regions.`
  }
}

class Country extends Region {
  constructor(region, country, nation){
    super(region)
    this.country = country;
    this.nation = nation;
  }

  get describe(){
    return `${this.country} is a ${this.nation} nation in the region of
    ${this.region}.`
  }
}

let Australia = new Region('Australia and NZ', 'Australia', 'developed')
let Germany = new Country('Europe', 'Germany', 'developed')
console.log(Australia.describe)
console.log(Germany.describe)
```

What will be the output of the above program, if executed?

Options :

Australia is a developed nation in the region of Australia and NZ.
Germany is a developed nation in the region of Europe.

6406532774992. ✖

Australia and NZ is one of the major geographical regions.
Germany is one of the major geographical regions.

6406532774993. ✖

Australia is a developed nation in the region of Australia and NZ.
Germany is one of the major geographical regions.

6406532774994. ✖

6406532774995. ✔

Australia and NZ is one of the major geographical regions.
Germany is a developed nation in the region of Europe.

Question Number : 114 Question Id : 640653825106 Question Type : MCQ

Correct Marks : 4.5

Question Label : Multiple Choice Question

Consider the following Vue application with markup index.html and JavaScript file app.js.

File: index.html

```
<div id = "app">
  <div>Welcome to Frontend Development</div>
  <new>Vue is a Frontend Framework</new>
</div>
<script src="script.js"></script>
```

File: script.js

```
Vue.component('new', {
  template : `<div>
    <slot>Vue is JS Framework</slot>
    <div>Learn Vue 2 and Vue 3</div>
  </div>`
});

new Vue({
  el : "#app",
})
```

What will be rendered on the browser screen?

Options :

Welcome to Frontend Development

Vue is a JS Framework

Vue is a Frontend Framework

Learn Vue 2 and Vue 3

6406532774996. ✖

6406532774997. ✖

Welcome to Frontend Development
Vue is a Frontend Framework
Vue is a JS Framework
Learn Vue 2 and Vue 3

6406532774998. ✓
Welcome to Frontend Development
Vue is a Frontend Framework
Learn Vue 2 and Vue 3

6406532774999. ✖
Welcome to Frontend Development
Vue is a JS Framework
Learn Vue 2 and Vue 3

Question Number : 115 Question Id : 640653825108 Question Type : MCQ

Correct Marks : 4.5

Question Label : Multiple Choice Question

Consider the following html.

```
<div id="app">
  <parent-component :title="parentTitle">
    <template slot="header">
      <h2>{{ headerTitle }}</h2>
    </template>
  </parent-component>
</div>

<script>
Vue.component('parent-component', {
  props: ['title'],
  template: `
    <div>
      <h1>{{ title }}</h1>
      <slot name="header"></slot>
      <p>Main Content</p>
    </div>
  `
});

new Vue({
  el: '#app',
  data: {
    parentTitle: 'Parent Component Title',
    headerTitle: 'Header Content'
  }
});
</script>
```

Assuming Vue CDN has been added to the HTML and the HTML format is correct.
What would be the output on the screen?

Options :

Parent Component Title

6406532775004. ✖ Main Content

Parent Component Title

Header Content

6406532775005. ✔ Main Content

6406532775006. ✖

Parent Component Title

<h2>{{ headerTitle }}</h2>

Main Content

Header Content

6406532775007. ✖ Main Content

MLT

Section Id :	64065359215
Section Number :	8
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	12
Number of Questions to be attempted :	12
Section Marks :	40
Display Number Panel :	Yes
Section Negative Marks :	0
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	No
Section Maximum Duration :	0
Section Minimum Duration :	0
Section Time In :	Minutes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	640653122748
Question Shuffling Allowed :	No

Question Number : 116 Question Id : 640653825109 Question Type : MCQ

Correct Marks : 0

Question Label : Multiple Choice Question

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