

AppDev1

Section Id :	64065351356
Section Number :	8
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	16
Number of Questions to be attempted :	16
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 :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	640653107623
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 117 Question Id : 640653737393 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

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

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?

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 :

6406532467900. ✓ YES

6406532467901. ✗ NO

Sub-Section Number :	2
Sub-Section Id :	640653107624
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 118 Question Id : 640653737394 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Create a simple HTML document with the following requirements:

1. Include a heading with the text "My Web Page" using an `<h1>` tag.
2. Add a paragraph with the text "Welcome to the world of HTML!" using a `<p>` tag.
3. Create an unordered list with three list items. The list items should contain the text "Item 1", "Item 2" and "Item 3" respectively, using `<li>` tags.
4. Include a link to "https://www.example.com" with the anchor text "Visit Example.com" using an `<a>` tag.

Which of the following HTML code is correct to fulfill these requirements?

Options :

6406532467902. ✗

```
<body>
  <h1>My Web Page</h1>
  <p>Welcome to the world of HTML!</p>
  <ol>
    <li>Item 1</li>
    <li>Item 2</li>
    <li>Item 3</li>
  </ol>
  <a href="https://www.example.com">Visit Example.com</a>
</body>
```

```
<body>
  <h1>My Web Page</h1>
  <p>Welcome to the world of HTML!</p>
  <ol>
    <li>Item 1</li>
    <li>Item 2</li>
    <li>Item 3</li>
  </ol>
  <a href="Visit Example.com">https://www.example.com</a>
</body>
```

6406532467903. ✖

```
<body>
  <h1>My Web Page</h1>
  <p>Welcome to the world of HTML!</p>
  <ul>
    <li>Item 1</li>
    <li>Item 2</li>
    <li>Item 3</li>
  </ul>
  <a href="Visit Example.com">https://www.example.com</a>
</body>
```

6406532467904. ✖

```
<body>
  <h1>My Web Page</h1>
  <p>Welcome to the world of HTML!</p>
  <ul>
    <li>Item 1</li>
    <li>Item 2</li>
    <li>Item 3</li>
  </ul>
  <a href="https://www.example.com">Visit Example.com</a>
</body>
```

6406532467905. ✔

Question Number : 119 Question Id : 640653737396 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Consider the following example.

```

```

Which of the following accessibility principle is followed in this example?

Options :

6406532467910. ✓ Perceivable

6406532467911. ✗ Operable

6406532467912. ✗ Understandable

6406532467913. ✗ Robust

Question Number : 120 Question Id : 640653737409 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

The directory listing of a folder and the content of each of its files are given below.

Directory Listing:

```
my_dir-|
        |-- base.html
        |-- home.html
        |-- index.html
```

Filename: base.html

```
<body>
    <h1>Hello from Base</h1>
</body>
```

Filename: home.html

```
<body>
    <h1>Hello from Home</h1>
</body>
```

Filename: index.html

```
<body>
    <h1>Hello from Index</h1>
</body>
```

If a simple Python HTTP server is created for this directory, what will be rendered on the browser for base URL?

Options :

6406532467958. ✖ **Hello from Base**

6406532467959. ✖ **Hello from Home**

6406532467960. ✔ **Hello from Index**

6406532467961. ✖ **Directory listing for /**

Sub-Section Id :	640653107625
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 121 Question Id : 640653737395 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

An HTML code and CSS code is given below. Which of the following correctly represents its rendered output?

CSS Code:

```
.one{color: brown;}
.two{color: yellow !important;}
```

HTML Code:

```
<!DOCTYPE html>
<html>
<head>
  <title>Document</title>
  <link href="style.css" rel="stylesheet">
  <style>
    h4{color: blue !important ;width: 90px;}
    p,span{font-weight: bold;}
  </style>
</head>
<body style="background-color:lightgray;" >
  <h4 style="color: yellow;"> Statement 1 </h4>
  <p class="one"> Statement 2 </p>
  <span class="two" style="color: blue;"> Statement 3 </span>
  <span> Statement 4 </span>
</body>
</html>
```

Options :

6406532467906. ✖

Statement 1 Statement 2 Statement 3 Statement 4

6406532467907. ✖

Statement 1 Statement 2
Statement 3
Statement 4

6406532467908. ✖

Statement 1
Statement 2
Statement 3
Statement 4

6406532467909. ✔

Statement 1
Statement 2
Statement 3 Statement 4

Question Number : 122 Question Id : 640653737398 Question Type : MCQ Is Question
Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction
Time : 0
Correct Marks : 3
Question Label : Multiple Choice Question

The following Python code snippet generates the output on the terminal.

```
from string import Template
s = Template('$who lives in $where')
out1 = s.substitute(who='Karl', where='Chennai')
print(out1)

b = dict(who='Tim')
out2 = Template('$who likes $what').safe_substitute(b)
print(out2)

out3 = Template('$who likes $what').substitute(b)
print(out3)
```

Which of the following is the correct output?

Options :

```
Karl lives in Chennai
Tim likes $what
Tim likes $what
```

6406532467918. ✖

```
Karl lives in Chennai
Tim likes
Tim likes $what
```

6406532467919. ✖

```
Karl lives in Chennai
KeyError: 'what'
Tim likes $what
```

6406532467920. ✖

```
Karl lives in Chennai
Tim likes $what
KeyError: 'what'
```

6406532467921. ✔

Question Number : 123 Question Id : 640653737399 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Consider the following python code snippet. What will be the rendered output?

```
from jinja2 import Template
data=[
    {"Course":"MAD-I", "ID":101, "Name":"John"},
    {"Course":"MAD-II", "ID":161, "Name":"Karl"},
    {"Course": "MAD-I", "ID":120, "Name":"Kim"}
]

t="""
<ul>
{% for group in data|groupby('Course') %}
    <li>
        {{ group.grouper }}
    <ul>
        {% for person in group.list %}
            {% if person.Name|length == 4 %}
                <li> {{ person.Name }} has ID {{ person.ID }} </li>
            {% endif %}
        {% endfor %}
    </ul>
    </li>
{% endfor %}
</ul>

"""
temp=Template(t)
print(temp.render(data = data))
```

Options :

- MAD-I
 - John has ID 101
 - Kim has ID 120
- MAD-II
 - Karl has ID 161

6406532467922. ✖

6406532467923.

- MAD-I
 - John has ID 101
 - Karl has ID 161
- MAD-II
 - Kim has ID 120

✖

- MAD-I
 - John has ID 101
- MAD-II
 - Karl has ID 161

6406532467924. ✔

- MAD-I
 - Karl has ID 101
- MAD-II
 - John has ID 161

6406532467925. ✖

Question Number : 124 Question Id : 640653737406 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

A certain network connection with a bandwidth of 12 Mbps allows making 4000 requests to a server per second. If each request is modified to have an additional data of 6 Kb, what should be the additional bandwidth required to maintain the rate of 4000 requests per second?

Options :

6406532467946. ✖ 12 Mbps

6406532467947. ✔ 24 Mbps

6406532467948. ✖ 36 Mbps

6406532467949. ✖ 48 Mbps

Question Number : 125 Question Id : 640653737408 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

A client sitting in a train is connected to a server through a network tower that has a range of 4.5 kilometers and a constant bandwidth of 5 Mbps. The train is at a negligible distance from the tower and is moving away from it at a speed of 180 kmph. How much data (in Megabytes) will be used by the client before the train completely moves out of the coverage area, assuming that the client is consuming the entire bandwidth?

Options :

6406532467954. ✖ 45 MB

6406532467955. ✖ 450 MB

6406532467956. ✖ 5.6 MB

6406532467957. ✔ 56.25 MB

Sub-Section Number :	4
Sub-Section Id :	640653107626
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 126 Question Id : 640653737397 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4.5 Max. Selectable Options : 0

Question Label : Multiple Select Question

Consider the following HTML document.

```
<!DOCTYPE html>
<html>
<head>
  <title>Document</title>
  <style>
    h2{
      background-color: lightgray;
      color: red;
      width:25%;
      text-align: center;
      /* ===code1=== */
    }
    #id {
      background-color: skyblue;
      border: 3px solid purple;
      color: red;
    }
    .class {
      color:blue ;
    }
  </style>
</head>
<body>
  <h2 class="class" id="id">Statement 1</h2>
  <h2 class="class">Statement 2</h2>
</body>
</html>
```

Which of the following is/are correct rendered output for given `===code1===`?

Options :

If `===code1===` is replaced by:

```
display:inline-block;
border: 2px solid purple;
```

Output:

Statement 1

Statement 2

6406532467914. ✓

6406532467915. ✖

If `===code1===` is replaced by:

```
display:block;
color: purple;
```

Output:

Statement 1

Statement 2

If `===code1===` is replaced by:

```
color: blue;
border: 2px solid purple;
```

Output :

Statement 1

Statement 2

6406532467916. ✓

If `===code1===` is left blank:

Output:

Statement 1

Statement 2

6406532467917. ✓

Sub-Section Number :

5

Sub-Section Id :

640653107627

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 127 Question Id : 640653737400 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4.5

Question Label : Multiple Choice Question

Consider the following python code snippet.

```
from jinja2 import Template as T1
from string import Template as T2

info = {'det1': 'Civil', 'Name': 'John', 'Civil': 'Mechanical', 'John': 'Sujoy'}

t1 = T1(" ${{Name}} and {{Name}} are {{det1}} and ${{det1}} engineer
respectively.")

out1 = t1.render(info)
out2 = T2(out1)
print(out2.substitute(info))
```

What is the generated output on the python console?

Options :

6406532467926. ✖ \$John and John are Civil and \$Civil engineer respectively.

6406532467927. ✖ John and Sujoy are Civil and Mechanical engineer respectively.

6406532467928. ✖ John and {{John}} are Civil and {{Civil}} engineer respectively.

6406532467929. ✔ Sujoy and John are Civil and Mechanical engineer respectively.

Question Number : 128 Question Id : 640653737407 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4.5

Question Label : Multiple Choice Question

Consider the following equation;

$$1xy25_8 = 1ED5_{16} = x89y_{10}.$$

Where x and y are unknowns. For what values of x and y does the above equation hold true?

Options :

6406532467950. ✖ x = 3 and y = 8

6406532467951. ✖ x = 6 and y = 4

6406532467952. ✔ x = 7 and y = 3

6406532467953. ✖ x = 1 and y = 2

Question Number : 129 Question Id : 640653737410 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4.5

Question Label : Multiple Choice Question

Consider the following Python code snippet.

Filename: app.py

```
from flask import Flask, request
import sys
app = Flask(__name__)

@app.route('/home', methods = sys.argv[1])
def my_func():
    if request.method == 'GET':
        return "<h1>Hello from App Development</h1>"

    elif request.method == 'POST':
        return "<h1>Hello from POST</h1>"

    else:
        return "<h1>Please enter a valid HTTP method</h1>"

app.run(debug = True)
```

If the above flask app is run using the command `python app.py POST` in one terminal, what will be the output on another terminal for command;

`curl http://127.0.0.1:5000/home ?`

Options :

6406532467962. ✖

<h1>Hello from App Development</h1>

6406532467963. ✖

<h1>Hello from App POST</h1>

6406532467964. ✖

<h1>Please enter a valid HTTP method</h1>

6406532467965. ✔

<h1>Method not Allowed</h1>

Sub-Section Id : 640653107628

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 130 Question Id : 640653737401 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Max. Selectable Options : 0

Question Label : Multiple Select Question

Consider the following Python code snippet "code.py".

Filename: code.py

```
import sys
from jinja2 import Template
vars = sys.argv

course_technologies = {'python': 'backend', 'javascript': 'frontend'}
template = Template("This course focuses on {{ technology }} development.")

if len(vars) > 2 and vars[2] in course_technologies:
    course = vars[1]
    technology = course_technologies[course]
    print(template.render(technology=technology))
else:
    print("Please specify a valid course name!")
```

Which of the following will be the correct command line input to the terminal to get the output: This course focuses on backend development. ?

Options :

6406532467930. ✖ python code.py course python

6406532467931. ✔ python code.py python javascript

6406532467932. ✔ python code.py python python

6406532467933. ✖ python code.py python backend

Question Number : 131 Question Id : 640653737402 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Max. Selectable Options : 0

Question Label : Multiple Select Question

Consider the following statements and choose the correct options.

Statement I: An author can write multiple books, but each book is written by only one author.

Statement II: A publisher can publish multiple books, but each book is published by only one publisher.

Statement III: A book belongs to one genre, but a genre can have multiple books.

Options :

6406532467934. ✖ Statement I represents a many-to-many relationship between Author and Book.

6406532467935. ✔ Statement I represents a one-to-many relationship between Author and Book.

6406532467936. ✔ Statement II represents a one-to-many relationship between Publisher and Book.

6406532467937. ✔ Statement III represents a many-to-one relationship between Book and Genre.

Sub-Section Number : 7

Sub-Section Id : 640653107629

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653737403 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (132 to 133)

Question Label : Comprehension

Answer the given subquestion.

Sub questions

Question Number : 132 Question Id : 640653737404 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

Consider the following flask application.

app.py

```
from flask import Flask, render_template, request

app = Flask(__name__)

@app.route('/greet')
def greet():
    user_name = request.args.get('name', 'Guest')
    greeting_message = f"Hello, {user_name}!"

    =====code here=====

if __name__ == "__main__":
    app.run(debug=True)
```

Which of the following should replace “code here” to construct the HTML response with the greeting_message correctly?

Options :

6406532467938. ✖ return "<h1>{{ greeting_message }}</h1>"

6406532467939. ✔ return f"<h1>{greeting_message}</h1>"

6406532467940. ✖ return "<h1>{greeting_message}</h1>"

6406532467941. ✖ return "Hello, {user_name}!"

Question Number : 133 Question Id : 640653737405 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Match the URLs in column A with their correct rendered output in Column B with the correct app.py code for the flask application given in the previous question.

Column A	Column B
1. http://127.0.0.1:5000/greet?name=MADI&guest=MADII	a. Hello, Guest!
2. http://127.0.0.1:5000/greet?name=MADII&guest=MADI	b. Hello, MADII!
3. http://127.0.0.1:5000/greet?	c. Hello, Guest!
4. http://127.0.0.1:5000/greet?guest=MADI	d. Hello, MADI!

Options :

6406532467942. ✖ 1-b, 2-d, 3-a, 4-c

6406532467943. ✖ 1-b, 2-a, 3-c, 4-d

6406532467944. ✔ 1-d, 2-b, 3-a, 4- c

6406532467945. ✖ 1-d, 2-a, 3-c, 4-b

MLF

Section Id : 64065351357
Section Number : 9
Section type : Online
Mandatory or Optional : Mandatory
Number of Questions : 11