two decimal places.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.11 to 0.15

AppDev1

Section Id :	64065338403
Section Number :	6
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	31
Number of Questions to be attempted :	31
Section Marks :	100
Display Number Panel :	Yes
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 :	64065380944
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 123 Question Id : 640653566096 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 1 (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 :

6406531891910. ✔ YES

6406531891911. ✖ NO

Sub-Section Number :	2
Sub-Section Id :	64065380945
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 124 Question Id : 640653566097 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

Which of the following statements is correct for the "alt" attribute of an <img> tag in HTML?

Options :

6406531891912. ✖ The "alt" attribute stores the address of an alternative image which gets loaded if the image URL specified in "src" attribute fails to load.

6406531891913. ✔

The "alt" attribute stores an alternative text which gets displayed if the image URL specified in "src" attribute fails to load.

6406531891914. ✖ It is mandatory to specify the value of "alt" attribute while using an <img> tag.

6406531891915. ✖ All of these.

Question Number : 125 Question Id : 640653566100 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

Which of the following would change the default templates folder to "views" in a Flask app?

Options :

6406531891924. ✖ `app = Flask(__name__, template= "views")`

6406531891925. ✖ `app = Flask(__name__, templates= "views")`

6406531891926. ✔ `app = Flask(__name__, template_folder= "views")`

6406531891927. ✖ `app = Flask(__name__, templates_folder= "views")`

Question Number : 126 Question Id : 640653566101 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 two statements and select the correct option.

Statement 1: Server-level logging can only indicate which URLs were accessed

Statement 2: Server-level logging can indicate if large number of requests were made in a short duration of time such as in DDoS attacks

Options :

6406531891928. ✳ Statement 1 is true, while statement 2 is false

6406531891929. ✳ Statement 2 is true, while statement 1 is false

6406531891930. ✔ Both statements 1 and 2 are correct

6406531891931. ✳ Both statements 1 and 2 are incorrect

Question Number : 127 Question Id : 640653566113 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 statements about HTML4 and HTML5 and select the correct option.

Statement 1: The HTML gets separated out from SGML from its fourth version, HTML4.

Statement 2: HTML5 has additional support for latest features like multimedia support, canvases etc. and it has its own parsing rules.

Options :

6406531891972. ✳ Both statements 1 and 2 are correct.

6406531891973. ✳ Both statements 1 and 2 are incorrect.

6406531891974. ✳ Statement 1 is correct but statement 2 is incorrect.

6406531891975. ✔ Statement 2 is correct but statement 1 is incorrect.

Question Number : 128 Question Id : 640653566117 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 statements and select the correct option.

Statement 1: Replication is used to improve performance and decrease server load.

Statement 2: Redundancy ensures data is not lost if a copy gets destroyed.

Options :

6406531891988. ✻ Statement 1 is true & statement 2 is false

6406531891989. ✻ Statement 2 is true & statement 1 is false

6406531891990. ✔ Both statements 1 and 2 are true

6406531891991. ✻ Both statements 1 and 2 are false

Question Number : 129 Question Id : 640653566124 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

Read the following statements regarding web accessibility principles and choose the correct option.

Statement 1: Understandable information and users interface helps developers to avoid and correct mistakes in their content.

Statement 2: Perceivable information ensures that the content does not cause any seizures and physical reaction to its users.

Options :

6406531892016. ✻ Both statement 1 and statement 2 are correct.

6406531892017. � Both statement 1 and statement 2 are incorrect

6406531892018. ✓ Statement 1 is correct but statement 2 is incorrect

6406531892019. � Statement 1 is incorrect but statement 2 is correct

Question Number : 130 Question Id : 640653566129 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

Match the first column with the second.

1	HTTPS	A	must be sent with each request
2	Cookies	B	base64 encoding
3	Digest Authentication	C	encrypted channel
4	HTTP Basic Authentication	D	hash function

Options :

6406531892032. � 1-C, 2-D, 3-A, 4-B

6406531892033. ✓ 1-C, 2-A, 3-D, 4-B

6406531892034. � 1-B, 2-A, 3-D, 4-C

6406531892035. � 1-A, 2-D, 3-B, 4-C

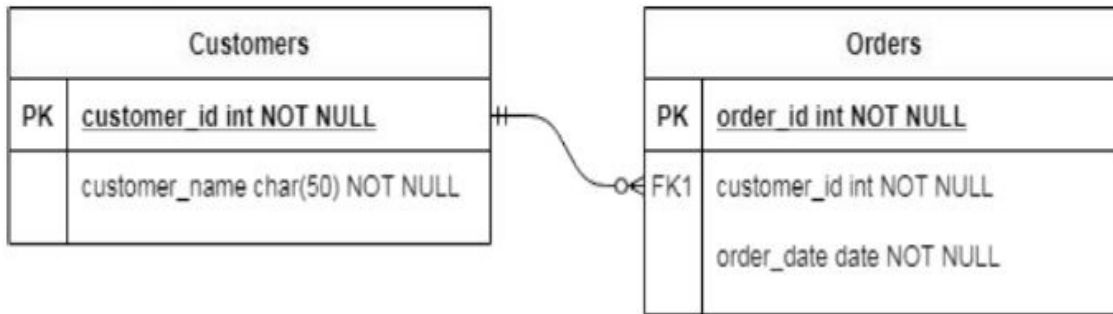| **Sub-Section Number :** | 3 |
Sub-Section Id :	64065380946
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 131 Question Id : 640653566098 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

What can be inferred from the ERD below?

Options :

6406531891916. ✔ A customer can exist without having any orders

6406531891917. ✖ An order can exist without belonging to any customer

6406531891918. ✖ A customer needs to have at least one order

6406531891919. ✔ An order must belong to one and only one customer

Question Number : 132 Question Id : 640653566099 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Consider the following code snippet.

```
@app.route('/user/<username>')
def profile(username):
    # CODE BLOCK HERE
```

Assume the database has a "User" table which has a TEXT column "username". If we want the server to return a 404 status code when a user goes to the route '/user/<username>' with a username that does not exist in the database, which of the following lines would give us the desired output?

Options :

6406531891920. ✔

```
user = User.query.filter_by(username=username).first()
if user is None:
    abort(404)
return render_template('profile.html', user=user)
```

```
user = User.query.filter_by(username=username).first()
if user is None:
    return render_template("404.html")
return render_template('profile.html', user=user)
```
6406531891921. ✖

```
user = User.query.filter_by(username=username).first_or_404()
return render_template('profile.html', user=user)
```
6406531891922. ✔

```
user = User.query.filter_by(username=username).first()
if user is None:
    return render_template("404.html"), 404
return render_template('profile.html', user=user)
```
6406531891923. ✔

Question Number : 133 Question Id : 640653566102 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Consider the following flask application running on the base URL and is accessed through a browser. Select the correct option(s).

```python
from flask import Flask, abort, request

app = Flask(__name__)

users = {
        1 : {"Name": "Ritu", "role": "Admin", "access": True},
        2 : {"Name": "Ramesh", "role": "User", "access": True},
        3 : {"Name": "Tejas", "role": "Admin", "access": True},
        4 : {"Name": "Manisha", "role": "User", "access": False}
        }

@app.route('/login')
def auth():
    cred = request.args
    if users[int(cred["id"])].get("access"):
            id = int(cred["id"])
            user = users[id]
            return "Welcome, "+ user.get("Name")+", you have
"+user.get("role")+" access"
    else:
        abort(403)

@app.errorhandler(403)
def no_access(error):
    return "Looks like you are not an authorized user!"

app.run(debug = True)
```

Options :

6406531891932. ✖ For the URL: `http://127.0.0.1:5000/?id=2`, The browser will render;
Welcome, Ramesh, you have User access.

6406531891933. ✔ For the URL: `http://127.0.0.1:5000/login?id=1`, The browser will render;
Welcome, Ritu, you have Admin access.

6406531891934. ✖ For the URL: `http://127.0.0.1:5000/login?id=4`, The browser will render;
Welcome, Manisha, you have User access.

6406531891935. ✔ For the URL: `http://127.0.0.1:5000/login?id=4`, The browser will render;
Looks like you are not an authorized user!.

Question Number : 134 Question Id : 640653566106 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Consider the following users list.

```
users = [{ "id":1, "name": "user_1", "role": "manager"},
         { "id":2, "name": "user_2", "role": "manager"},
         { "id":3, "name": "user_3", "role": "manager"}]
```

An ordered HTML list is to be created for users where every list item should have a clickable "name" attribute redirecting to the endpoint "/show_users/<id>" where "id" is the "id" attribute of the same user dictionary. The correct way of doing it with jinja and HTML is _____ .

Options :

```
<ol>
{% for user in users %}
   <li><a href="/show_users/{{user.id}}">{{user.name}}</a></li>
{% endfor %}
</ol>
```
6406531891948. ✔

```
<ol>
{% for user in users %}
   <li><a href="/show_users/{{user['id']}}">{{user['name']}}</a></li>
{% endfor %}
</ol>
```
6406531891949. ✔

```
<ol>
  <li><a href="/show_users/{{users[0].id}}">{{users[0].name}}</a></li>
  <li><a href="/show_users/{{users[1].id}}">{{users[1].name}}</a></li>
  <li><a href="/show_users/{{users[2].id}}">{{users[2].name}}</a></li>
</ol>
```
6406531891950. ✔

6406531891951. ✔

```
<ol>
{% for user in users %}
   <li><a href="/show_users/{{user.name[-1]}}">{{user.name}}</a></li>
{% endfor %}
</ol>
```

Question Number : 135 Question Id : 640653566116 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Consider the following code snippet.

```
def foo(x,y):
    if x < 0:
        y += 1
    if y > 0:
        x -= 1
    return x + y
```

Test:

```
foo(-1, 1)
foo(1, -1)
```

Which of the following is correct regarding the coverage of the test?

Options :

6406531891984. ✔ 100% statement coverage

6406531891985. ✔ 100% function coverage

6406531891986. ✔ 100% branch coverage

6406531891987. ✖ 100% condition coverage

Sub-Section Number : 4

Question Number : 136 Question Id : 640653566103 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

If N_x is a number N represented in the base 'x' and the equation.

$$400_a \;=\; 100_b \;=\; 256_c$$

Holds for a specific set of a, b and c. The correct values of a, b and c that satisfy the above equation are:

Options :

6406531891936. ✖ a = 8; b = 10; c = 16;

6406531891937. ✖ a = 10; b = 2; c = 16;

6406531891938. ✔ a = 8; b = 16; c = 10;

6406531891939. ✖ a = 2; b = 16; c = 8;

Question Number : 137 Question Id : 640653566110 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 HTML file and select the correct option.

```
<!DOCTYPE html>
<html lang="en">
<body>
    <table id="rows">
        <tr>
            <th>Name</th>
            <th>City</th>
        </tr>
    </table>
    <button onclick="perform()">action</button>
    <script>
        function perform(){
            let row = document.createElement("tr")
            let td1 = document.createElement("td")
            td1.innerText = "name_1"
            let td2 = document.createElement("td")
            td2.innerText = "city_1"
            row.appendChild(td1)
            row.appendChild(td2)
            let rows = document.getElementById("rows")
            rows.appendChild(row)
        }
    </script>
</body>
</html>
```

Options :

6406531891960. ✸ The action button when clicked adds a new column to the table with value "city_1".

6406531891961. ✸ The action button when clicked adds a new column to the table with value "name_1".

6406531891962. ✔ The action button when clicked adds a new row to the table with values "name_1" in the first column and "city_1" in the second column.

6406531891963. ✸ The action button when clicked adds a new row to the table with values "city_1" in the first column and "name_1" in the second column.

Question Number : 138 Question Id : 640653566114 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 a discourse forum where a user unlocks the ability to post images once he makes more than 25 posts. What kind of access control is this?

Options :

6406531891976. ✻ Role-based access control

6406531891977. ✔ Attribute-based access control

6406531891978. ✻ Both role-based and attribute-based access control

6406531891979. ✻ None of these

Question Number : 139 Question Id : 640653566118 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 Table **products** in SQLite database created using model class **Product** and the python file **main.py** given below.

products:

id	pro_name	section
1	Pencil	stationary
2	Butter	food
3	Pencil	art
4	Face wash	cosmetics
5	Olive	vegetables

main.py

```
from jinja2 import Template
templates = """
                {% if result %}
                <ol>
                    {% for product in products %}
                        <li>{{product.pro_name}}</li>
                        <li>{{product.section}}</li>
                    {% endfor %}
                </ol>
                {% endif %}
            """
products = Product.query.filter_by(pro_name = 'Pencil').all()

Templates = Template(templates)
result = Templates.render(products = products)
print(result)
```

What will be the output on the terminal?

Options :

```
Pencil stationary
Pencil art
```
6406531891992. ✖


```
<ol>
    <li>Pencil stationary</li>
    <li>Pencil art</li>
</ol>
```
6406531891993. ✖

```
Pencil
stationary
Pencil
art
```
6406531891994. ✖

```
<ol>
    <li>Pencil</li>
    <li>stationary</li>
    <li>Pencil</li>
    <li>art</li>
</ol>
```
6406531891995. ✔

Question Number : 140 Question Id : 640653566119 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 statements regarding Continuous Integration and Continuous Deployment and select the correct option.

Statement 1: As part of continuous integration, frequent, isolated changes are tested and reported on as soon as they are added to a larger code base.

Statement 2: When a change is made to an application, it is automatically deployed into production using a continuous deployment strategy.

Options :

6406531891996. ✔ Statement 1 and statement 2 both are correct.

6406531891997. ✖ Statement 1 and statement 2 both are incorrect.

6406531891998. ✖ Statement 1 is correct and statement 2 is incorrect.

6406531891999. ✖ Statement 1 is incorrect and statement 2 is correct.

Question Number : 141 Question Id : 640653566121 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 following types of testing with their functionality.

A. Black box testing	1. Focuses primarily on input and output of the software application.
B. Unit testing	2. Tests individual pieces of source code.
C. Grey box testing	3. Analyzes the internal structures, the data structures, internal design, code structure, and the working of the software.
D. White box testing	4. Testing the functionality of the software. In the event of errors, they can access the software code.

Which of the following is correct matching?

Options :

6406531892004. ✔ A → 1, B → 2, C → 4, D → 3

6406531892005. ✖ A → 4, B → 3, C → 2, D → 1

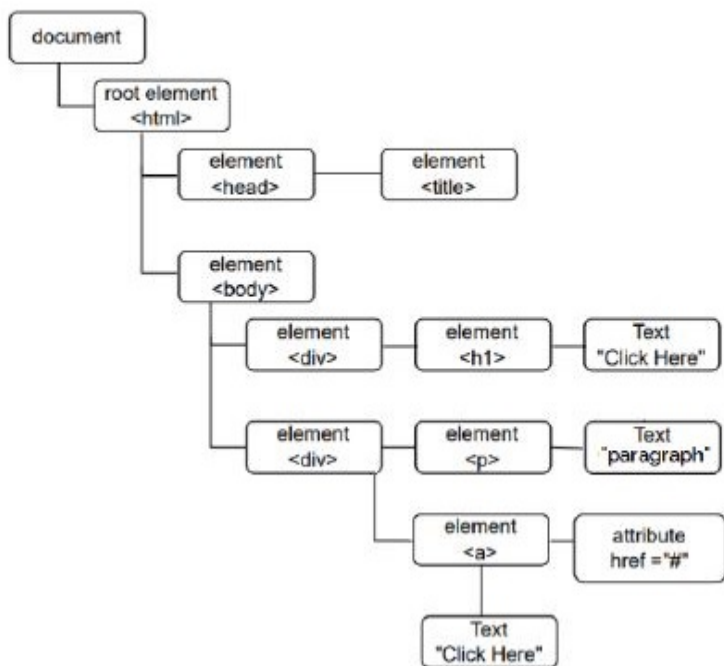6406531892006. ✖ A → 4, B → 1, C → 2, D → 3

6406531892007. ✖ A → 3, B → 2, C → 1, D → 4

Question Number : 142 Question Id : 640653566122 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

What is the following HTML code is correctly represented by the DOM structure below?

Options :

```
<html>
<head>
  <title>My website</title>
</head>
<body>
    <div>
    <h1> Header </h1>
    <p><a href="#"> Click Here </a></p>
    </div>
</body>
</html>
```

6406531892008. ✖

```
<html>
<head>
  <title>My website</title>
</head>
<body>
    <div>
        <h1> Header </h1>
    </div>
    <div>
        <p> <a href="#"> Click Here </a> </p>
    </div>
</body>
</html>
```

6406531892009. ✖

```
<html>
<head>
  <title>My website</title>
</head>
<body>
    <div>
        <h1> Header </h1>
    </div>
    <div>
        <p>Paragraph</p>
        <a href="#"> Click Here </a>
    </div>
</body>
</html>
```

6406531892010. ✔

```
<html>
<head>
  <title>My website</title>
</head>
<body>
    <h1> Header </h1>
        <p><a href="#"> Click Here </a></p>
</body>
</html>
```

6406531892011. ✖

Question Number : 143 Question Id : 640653566123 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 table "emp" created in SQLite database corresponding to model class "Employee" using `flask_sqlalchemy`.

Id	Name	Designation	Gender	Salary
1	Raji	Headmaster	Female	4500
2	Ram	Teacher	Male	5000
3	Raveena	Teacher	Female	3000
4	Reshma	Technical staff	Female	2000
5	Ravi	Teacher	Male	1000

Which of the following code snippets correctly increases the salary of all the teachers by 1000 Rupees when typed in the Python console?

Options :

```
>>> emp = Employee.query.filter_by(Designation = 'Teacher').all()
>>> for staff in emp:
...     staff.Salary += 1000
...
>>> db.session.commit()
```
6406531892012. ✔

```
>>> emp = Employee.query.filter_by(Gender = 'Female').all()
>>> staff.Salary += 1000
>>> db.session.commit()
```
6406531892013. ✖

```
>>> emp = Employee.query.filter_by(Gender = 'Female').all()
>>> for staff in emp:
...     staff.Salary += 1000
...
>>> db.session.commit()
```
6406531892014. ✖

```
>>>emp = Employee.query.filter(Employee.Gender.like('T%')).all()
>>> for staff in emp:
...     staff.Salary += 1000
...
>>> db.session.commit()
```
6406531892015. ✖

Question Number : 144 Question Id : 640653566128 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.

```python
from math import factorial

def prettify(func):
    def wrapper(num):
        try:
            return func(num)
        except:
            return "Please check your number!"
    return wrapper

@prettify
def fact(num):
    return factorial(num)

out = fact(-4)
print(out)
```

What will the output if the above Python code is run on the terminal?

Options :

6406531892028. ✖ -24

6406531892029. ✖ 24

6406531892030. ✔ Please check your number!

6406531892031. ✖ None

Question Number : 145 Question Id : 640653566130 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

Read the following statements regarding web accessibility principles and choose the correct option.

Statement 1: The command `git merge <branch_name>` merges all the change done to currently active branch.

Statement 2: The command `git merge <branch_name>` merges all the change done to master branch.

Options :

6406531892036. ✸ Both statement 1 and statement 2 are correct

6406531892037. ✸ Both statement 1 and statement 2 are incorrect

6406531892038. ✔ Statement 1 is correct but statement 2 is incorrect

6406531892039. ✸ Statement 1 is incorrect but statement 2 is correct

Sub-Section Number :	5
Sub-Section Id :	64065380948
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 146 Question Id : 640653566104 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 a function `remainder`, and a set of test cases given below.

Filename: `test_file.py`

```python
def remainder(numerator, denominator):
    rem = numerator % denominator
    return rem

def test_func0():
    assert remainder(5,7) == 5

def test_function1():
    assert remainder(20,4) == 3

def test_func2():
    assert remainder(31,8) == 6

def test_function3():
    assert remainder(2,3) == 2
```

What will be the output on the terminal for the command `pytest test_file.py -k func` ?

Options :

6406531891940. ✖
```
========= 1 failed, 1 passed, 2 deselected in 0.41s =========
```

6406531891941. ✖
```
=============== 2 passed, 2 deselected in 0.41s ===============
```

6406531891942. ✔
```
=============== 2 failed, 2 passed in 0.41s ===================
```

6406531891943. ✖
```
============== 2 failed, 2 deselected  in 0.41s ==============
```

Question Number : 147 Question Id : 640653566105 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 models Library and Book corresponding to tables library and book in SQLite database.

```
class Library(db.Model):
    id = db.Column(db.Integer(), primary_key = True)
    name = db.Column(db.String(), unique = True)

class Book(db.Model):
    id = db.Column(db.Integer(), primary_key = True)
    name = db.Column(db.String(), unique = True)
    library = db.Column(db.Integer(), unique = True, db.ForeignKey("library.id"))
```

Based on the model schemas, what relationship do the classes Library and Book share?

Options :

6406531891944. ✖ Many-to-Many

6406531891945. ✖ One-to-Many

6406531891946. ✔ One-to-One

6406531891947. ✖ The tables are not at all related

Question Number : 148 Question Id : 640653566112 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 `<span>` element and the styling given to it in `<style>` tag using element selector in the HTML file below.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Span</title>
    <style>
        span{
            color: red;
            border:1px solid blue;
        }
        </style>
</head>
<body>
    <span id="this_span">Hello Students! MAD-I welcomes you!
    </span>
</body>
</html>
```

What will be the final style applied to `<span>` tag if an additional style is added via the ID selector given below?

```css
#this_span{
        width: 1200px;
        border: 2px solid pink;
        }
```

Options :

6406531891968. ✖

```css
color: red;
width: 1200px;
border: 2px solid pink;
```

6406531891969. ✖

```css
color: red;
width: 1200px;
border: 1px solid blue;
```

6406531891970. ✔

```css
color: red;
border: 2px solid pink;
```

6406531891971. ✖

```
width: 1200px;
border: 2px solid pink;
```

Question Number : 149 Question Id : 640653566115 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

Software packages A and B of complexity $O(n^2 logn)$ and $O(n^3)$, respectively, spend exactly $T_A(n) = C_A n^2 log_{10}(n)$ and $T_B(n) = C_B n^3$ milliseconds to process n data items. During a test, the average time of processing $n = 10^5$ data items with the package A and B is 600 milliseconds and 300 milliseconds, respectively. Which of two software packages defined above will work better to process 10^6 data items?

Options :

6406531891980. ✔ Software package A

6406531891981. ✖ Software package B

6406531891982. ✖ Both Software packages A and B will take same time to process 10^6 items

6406531891983. ✖ Both Software packages A and B will take infinitely long time to process 10^6 items

Question Number : 150 Question Id : 640653566120 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.

```python
from jinja2 import Template

data = [
        {"vehicle_id":"ev101", "vehicle_name":"electroN", "fuel_type":"electric"},
        {"vehicle_id":"pt201", "vehicle_name":"discover", "fuel_type":"petrol"},
        {"vehicle_id":"dz301", "vehicle_name":"apex", "fuel_type":"diesel"},
       ]

this_text = """
            <h1> Ordered Vehicles </h1>
            {% set keys = data[0].keys() %}
            {% set keys = keys|list %}
            {% for i in range(data|length) %}
                {{keys[i]}} : {{data[i][keys[i]]}}
            {% endfor %}
            <h3> Total: {{ data|length }} </h3>
            """

this_temp = Template(this_text)
rendered = this_temp.render(data = data[::-1])
print(rendered)
```

How will the browser render the output of the above given Python code?

Options :

Ordered Vehicles

vehicle_id : pt201

vehicle_name : discover

fuel_type : petrol

Total: 3

6406531892000. ✖

Ordered Vehicles

vehicle_id : ev101

vehicle_name : electroN

fuel_type : electric

Total: 3

6406531892001. ✖

Ordered Vehicles

vehicle_id : ev101

vehicle_name : discover

fuel_type : diesel

Total: 3

6406531892002. ✖

Ordered Vehicles

vehicle_id : dz301

vehicle_name : discover

fuel_type : electric

Total: 3

6406531892003. ✔

Sub-Section Number :	6
Sub-Section Id :	64065380949
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653566107 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 : (151 to 152)

Question Label : Comprehension

A client machine C is 12000 kms away from the server machine S. A router R is situated somewhere in between the client C and the server S and is connected to client C with cable and makes aerial connection with the server S. [Assume: The speed of light on cable is 1.5×10^{8} m/s and in air is 3×10^{8} m/s. The client, server and the router lie on a straight line]

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 151 Question Id : 640653566108 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

At what distance (kms) should the router be placed from the client so that round-trip latency of the network remains as low as 110 milliseconds?

Options :

6406531891952. ✱ 6000 kilometers

6406531891953. ✔ 4500 kilometers

6406531891954. ✱ 7500 kilometers

6406531891955. ✱ 8000 kilometers

Question Number : 152 Question Id : 640653566109 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

What will be the round-trip latency (milliseconds) of the network if the router is placed at exactly midway from the client and the server?

Options :

6406531891956. ✱ 6

6406531891957. ✱ 60

6406531891958. ✱ 110

6406531891959. ✔ 120

Sub-Section Number :	7
Sub-Section Id :	64065380950
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 153 Question Id : 640653566111 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2 Selectable Option : 0

Question Label : Multiple Select Question

Consider the Amazon Alexa device. Which of the following would constitute the view of the application behind such a device?

Options :

6406531891964. ✔ The AI voice

6406531891965. ✔ The LED light around the device

6406531891966. ✱ The body of the device

6406531891967. ✱ None of these

Sub-Section Number :	8
Sub-Section Id :	64065380951
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653566125 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 : (154 to 155)

Question Label : Comprehension

Consider the following resource API created with help of `flask_restful`.

```python
from flask import Flask, request
from flask_restful import Resource, Api

app = Flask(__name__)

api = Api(app)

class TestApi(Resource):
    def post(self, state, city):
        return {"state": state, "capital": city}

    def get(self):
        info = request.args
        return info

api.add_resource(TestApi, '/india','/india/<state>/<city>')

app.run(debug = True)
```

If the above application is running locally on http://127.0.0.1:5000, answer the given subquestions

Sub questions

Question Number : 154 Question Id : 640653566126 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

Which of the following URL will return a 200 OK for GET HTTP method?

Options :

6406531892020. ✖ `http://127.0.0.1:5000/maharastra/mumbai`

6406531892021. ✔ `http://127.0.0.1:5000/india?state=tamilnadu&capital=chennai`

6406531892022. ✖ `http://127.0.0.1:5000/india/madhyapradesh/bhopal`

6406531892023. ✖ `http://127.0.0.1:5000?state=rajasthan&capital=jaipur`

Question Number : 155 Question Id : 640653566127 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

Which of the following URL will return a 200 OK for POST HTTP method?

Options :

6406531892024. ✖ `http://127.0.0.1:5000/india?state=odisha&capital=bhubaneshwar`

6406531892025. ✔ `http://127.0.0.1:5000?state=telangana&capital=hyderabad`

6406531892026. ✖ `http://127.0.0.1:5000/karnataka/bangalore`

6406531892027. ✖ `http://127.0.0.1:5000/india/westbengal/kolkata`

TDS

Section Id :	64065338404
Section Number :	7
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	62
Number of Questions to be attempted :	62
Section Marks :	70
Display Number Panel :	Yes
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 :	64065380952
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 156 Question Id : 640653566131 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 : TOOLS IN DATA SCIENCE (COMPUTER BASED EXAM)"

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