

Possible Answers :

4

Question Number : 55 Question Id : 640653454712 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Selectable Option : 0

Question Label : Multiple Select Question

The point $\begin{bmatrix} 10 \\ 0 \end{bmatrix}$ with label 1 is added to the existing training dataset. We will now refer to these 9 points as the new dataset.

Options :

6406531512237. ✖ The new dataset is **not** linearly separable.

6406531512238. ✔ The new dataset is linearly separable.

6406531512239. ✔ If a hard-margin, linear-SVM is trained on the new dataset, the optimal weight vector will be $\begin{bmatrix} 0.5 \\ 1 \end{bmatrix}$

6406531512240. ✖ If a hard-margin, linear-SVM is trained on this new dataset with 9 points, the optimal weight vector will **not** be $\begin{bmatrix} 0.5 \\ 1 \end{bmatrix}$

AppDev1

Section Id : 64065329419

Section Number : 3

Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	28
Number of Questions to be attempted :	28
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 :	64065365705
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 56 Question Id : 640653454742 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"

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

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

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

Options :

6406531512299.  YES

6406531512300.  NO

Sub-Section Number : 2
Sub-Section Id : 64065365706
Question Shuffling Allowed : Yes
Is Section Default? : null

Question Number : 57 Question Id : 640653454747 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 HTML document with script which is running at the URL <http://127.0.0.1:8000>, then choose the correct output of the JSON object.

```
<!DOCTYPE html>
<html>
  <body>

    <h2>Creating a JSON String</h2>

    <p id="demo"></p>

    <script>
      const txt = '{"name":"Balu", "age":30, "city":"New Delhi"}'
      const obj = JSON.parse(txt);
      document.getElementById("demo").innerHTML = "Hi\n" + obj.name +
",\t" + obj.city + "," + obj.age*2;
    </script>

  </body>
</html>
```

Options :

6406531512314. ✖

Creating a JSON String

Hi Balu, New Delhi,30

Creating a JSON String

Hi Balu, 30, New Delhi

6406531512315. ✖

Creating a JSON String

Hi Balu, New Delhi,90

6406531512316. ✖

Creating a JSON String

Hi Balu, New Delhi, 60

6406531512317. ✔

Question Number : 58 Question Id : 640653454749 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

If the given python program is executed using pytest, then identify the status of the test code.

File name: test1.py

```
def dec(x):  
    return x-1  
  
def test_answer():  
    assert dec(3) == 2
```

Options :

6406531512322. ✖ passed test1.py test_answer - assert 2 == 3

6406531512323. ✖ 2 Failed

6406531512324. ✔ 1 passed

6406531512325. ✖ Failed test1.py test_answer - assert 2 == 3

Question Number : 59 Question Id : 640653454751 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 lines can be used in a template to inherit another **base.html** template that provides a basic, uniform layout?

Options :

6406531512330. ✖ {% expand 'base.html'%}

6406531512331. ✖ {% include 'base.html'%}

6406531512332. ✔ {% extends 'base.html'%}

6406531512333. ✖ {% inherits 'base.html' %}

Question Number : 60 Question Id : 640653454753 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 routes binds the **index()** function to the application's root URL and renders the **index.html** template?

Options :

```
@app.route('/')  
def index():  
    return render_template('index')
```

6406531512338. ✖

6406531512339. ✓

```
@app.route('/')
def index():
    return render_template('index.html')
```

6406531512340. ✖

```
@app.route('/')
def index():
    return render_template(index.html)
```

6406531512341. ✖

```
@app.route('index.html')
def index():
    return render_template('/')
```

Question Number : 61 Question Id : 640653454756 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

In which of the following options, **url_for()** function calls will produce URL

http://localhost:5000/home?

Options :

6406531512350. ✖

```
@app.route('/home')
def index():
    return "This is Homepage content"

@app.route('/')
def homepage():
    return redirect(url_for(index))
```

6406531512351. ✓

```
@app.route('/home')
def index():
    return "This is Homepage content"

@app.route('/')
def homepage():
    return redirect(url_for('index'))
```

```
@app.route('/home')
def index():
    return "This is Homepage content"

@app.route('/')
def homepage():
    return redirect(url_for('/home'))
```

6406531512352. ✖

```
@app.route('/home')
def index():
    return "This is Homepage content"

@app.route('/')
def homepage():
    return redirect(url_for('home'))
```

6406531512353. ✖

Question Number : 62 Question Id : 640653454775 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 carefully and mark the correct answer:

Statement 1: Continuous integration is the practice of automating the integration of code changes from multiple contributors into a single software project

Statement 2: Continuous Delivery refers to automated delivery of "release package" on each

successful test

Options :

6406531512410. ✔ Both statements 1 and 2 are correct

6406531512411. ✖ Both statements 1 and 2 are incorrect.

6406531512412. ✖ Statement 1 is correct, but statement 2 is incorrect.

6406531512413. ✖ Statement 2 is correct, but statement 1 is incorrect.

Sub-Section Number : 3

Sub-Section Id : 64065365707

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 63 Question Id : 640653454744 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Short Answer Question

Compute the octal representation of the binary number $(01000101)_2$.

Note: The answer must be an integer. For ex: If the octal representation is $(39)_8$, then you must write 39 only

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

105

Sub-Section Number : 4

Sub-Section Id : 64065365708

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 64 Question Id : 640653454743 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 URL given below.

<https://onlinedegree.com/academics?course=appdev1#week2>

Which of the following options correctly describes each component of the URL given above?

URL Component	Name
1. https	A. Domain Name
2. onlinedegree.com	B. Query String
3. /academics	C. Protocol
4. ?course=appdev1	D. Fragment
5. #week2	E. Path

Options :

6406531512301. ✖ 1-C, 2-A, 3-D, 4-B, 5-E

6406531512302. ✔ 1-C, 2-A, 3-E, 4-B, 5-D

6406531512303. ✖ 1-A, 2-C, 3-D, 4-B, 5-E

6406531512304. ✖ 1-C, 2-A, 3-B, 4-E, 5-D

Question Number : 65 Question Id : 640653454748 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 flask python snippet with all preliminary conditions.

```
class User(UserMixin, db.Model):
    id = db.Column(db.Integer, primary_key = True)
    name = db.Column(db.String(30))
    def __init__(self, id, name):
        self.id = id
        self.name = name
@login_manager.user_loader
def firstuser(id):
    return User.query.get(int(id))
@app.route('/')

def index():
    u1 = User.query.filter_by(id = 112).first()
    login_user(u1)
    return current_user.name + 'logged in'
@app.route('/logout')
@login_required
def logout():
    logout_user()
    return 'logged out'
@app.route('/home')
@login_required
def home():
    return "current user is " + current_user.name

def init_db():
    db.create_all()
    new_user = User(112, 'Rose')
    new_user2 = User(113, 'lily')
    db.session.add(new_user)
    db.session.add(new_user2)
    db.session.commit()
if __name__ == '__main__':
    init_db()
    app.run(debug = True)
```

If the above program is running in the URL "<http://127.0.0.1:8000>" then what will be the output for the given URLs in sequence

- <http://127.0.0.1:8000>

• <http://127.0.0.1:8000/logout>

• <http://127.0.0.1:8000/home>

Options :

6406531512318. ✖ current user is lily
logged out

Unauthorized user

6406531512319. ✔ Rose logged in
logged out

Unauthorized user

6406531512320. ✖ Rose logged in
current user is Rose
logged out

6406531512321. ✖ lily logged in
current user is lily
logged out

Question Number : 66 Question Id : 640653454750 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

Which of the following is the correct order of precedence to reflect the effect of style in HTML documents?

Options :

6406531512326. ✖ internal > inline > external

6406531512327. ✔ inline > internal > external

6406531512328. ✖ inline > external > internal

6406531512329. ✖ external > internal > inline

Question Number : 67 Question Id : 640653454752 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

Which of the following Jinja templates correctly implements a simple **if-else** statement?

Options :

6406531512334. ✖

```
{% if name %}
    <h1>Hello, {{user_name}}</h1>
{% else %}
    <h1> What is your name?</h1>
```

6406531512335. ✖

```
{% if name %}
    <h1>Hello, {{name}}!</h1>
{% else %}
    <h1>What is your name?</h1>
{% end %}
```

6406531512336. ✔

```
{% if name %}
    <h1>Hello, {{name}}!</h1>
{% else %}
    <h1>What is your name?</h1>
{% endif %}
```

6406531512337. ✖

```
{{ if name }}
    <h1>Hello, {%name%!</h1>
{{ else }}
    <h1>What is your name?</h1>
{{ endif }}
```

Question Number : 68 Question Id : 640653454754 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 template named **userinfo.html** contains the following line inside the body tag:

```
<h1> Hello {{user_name}}! </h1>
```

Which of the following code snippets will utilize the template to display **Hello Ram** when **http://localhost:5000/user/Ram** is visited on the browser?

Options :

6406531512342. ✖

```
@app.route('/user/<name>')
def user():
    return render_template('userinfo.html',user_name=name)
```

6406531512343. ✔

```
@app.route('/user/<name>')
def user(name):
    return render_template('userinfo.html',user_name=name)
```

6406531512344. ✖

```
@app.route('/user/<user_name>')
def user(name):
    return render_template('userinfo.html',user_name = name)
```

6406531512345. ✖

```
@app.route('/user/<name>')
def user(name):
    return render_template('templates/userinfo',user_name=name)
```

Question Number : 69 Question Id : 640653454755 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

Which line of code correctly adds the below **Hello** class as a resource to a Flask application to get data using “**http://localhost:5000/hello**” URL?

```
from flask_restful import Api
api = Api(app)
class Hello(Resource):
    def get(self):
        return {'User': 'Abhishek'}
```

Options :

6406531512346. ✓

```
api.add_resource(Hello, '/hello')
```

6406531512347. ✖

```
api.add_argument(Hello, '/hello')
```

6406531512348. ✖

```
api.resource(Hello, '/hello')
```

6406531512349. ✖

```
api.put_resource(Hello, '/hello')
```

Question Number : 70 Question Id : 640653454758 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 server using the inbuilt http module of Python, is running for a directory **My_app** whose file structure and content of each file is given below.

Folder: My_app

```
My_app
|_ home.html
|_ first.html
|_ main.html
```

File: home.html

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

File: first.html

```
<h1>Hello from First!</h1>
```

File: main.html

```
<h1>Hello from Main!</h1>
```

What will be rendered by the browser for the URL: `http://localhost:8000/first.html` assuming that 8000 is the port of connection?

Options :

Directory listing for /

- [first.html](#)
- [home.html](#)
- [main.html](#)

6406531512358. ✖

6406531512359. ✔ Hello from First!

6406531512360. ✖ Hello from Home!

6406531512361. ✖ Hello from Main!

Question Number : 71 Question Id : 640653454776 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:

A. API	1. Servers do not assume anything about the client's state; they only serve responses.
B. MVC	2. An action is assigned to each uniform resource locator.
C. Routing	3. A standard way defined between two applications for them to communicate.
D. Stateless	4. A design pattern that emphasizes the separation of concerns.

Which of the following is the correct?

Options :

6406531512414. ✖ A-1, B-2, C-3, D-4

6406531512415. ✖ A-2, B-4, C-1, D-3

6406531512416. ✔ A-3, B-4, C-2, D-1

6406531512417. ✖ A-4, B-3, C-1, D-2

Sub-Section Number :

5

Sub-Section Id :

64065365709

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 72 Question Id : 640653454745 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

Which of the following statement(s) is/are false regarding Git?

Options :

6406531512306. ✔ Git is an example of a centralized version control system.

6406531512307. ✖ A file can stay in both working directory and staging area at a given time, while working with Git.

6406531512308. ✔ Git and GitLab/GitHub are essentially the same.

6406531512309. ✖ The command "git checkout -b <branch_name> " will create the new branch and switches to the new branch created.

Question Number : 73 Question Id : 640653454746 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

Which of the following statement(s) is/are true regarding database migrations?

Options :

6406531512310. ✖ Flask does not provide support for migrations, as of December 2022.

6406531512311. ✔ The database migration allows a developer to make schema changes without losing the data

6406531512312. ✖ One of the disadvantages of migration is that a developer can only upgrade the database, and it does not allow rollbacks.

6406531512313. ✔ The migration is useful when a business wants to move from an on-premise database to a cloud based database.

Question Number : 74 Question Id : 640653454757 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 Model for User.

```
class User(db.Model):
    id = db.Column(db.Integer, primary_key=True)
    email = db.Column(db.String(100), unique=True, index=True)
    name = db.Column(db.String(100))
    password = db.Column(db.String(100))
```

Which of the following methods from the Flask-sqlalchemy package will behave the same as SQL query `select * from User where name='Ram'?`

Options :

6406531512354. ✓ `User.query.filter(User.name = 'Ram').all()`

6406531512355. ✗ `User.query.get(name = 'Ram').all()`

6406531512356. ✗ `User.query.filter_by('Ram').all()`

6406531512357. ✓ `User.query.filter_by(name = 'Ram').all()`

Sub-Section Number :

6

Sub-Section Id :

64065365710

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 75 Question Id : 640653454777 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 constraints for the “**student**” table:

Column Name	Datatype	Constraints
RollNo	Integer	Primary Key
Name	String	Not Null
Section	Integer	Not Null
Department	String	Not Null

In most cases, the query executed in the student table looks like the one below.

```
SELECT RollNo, Name, AadhaarNo FROM student WHERE Section = 'B';
```

For the above student table, which of the following columns would be the most appropriate for the indexing?

Options :

- 6406531512418. ✖ RollNo
- 6406531512419. ✖ Name
- 6406531512420. ✔ Section
- 6406531512421. ✖ Department

Sub-Section Number : 7

Sub-Section Id : 64065365711

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 76 Question Id : 640653454762 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 Selectable Option : 0

Question Label : Multiple Select Question

Consider the following Python code snippet:

Filename: module_0.py

```
import sys

arguments = sys.argv

courses = {'MAD 1': '1002', 'MAD-2': '2003', 'BDM': '205', 'SysCom': '304'}

def operate():
    arg_1 = arguments[1]
    arg_2 = courses[arg_1]

    return f"The function output is: {len(arg_1 + arg_2)}"

print(operate())
```

The above file will yield the output as “The function output is: 9”, for which of the following command line inputs?

Options :

6406531512370. ✖ python module_0.py MAD 1

6406531512371. ✔ python module_0.py MAD-2

6406531512372. ✖ python module_0.py BDM

6406531512373. ✔ python module_0.py SysCom

Question Number : 77 Question Id : 640653454773 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 Selectable Option : 0

Question Label : Multiple Select Question

Consider two software packages A and B spend exactly $T_A(N) = 2N^2 + 9$ and T_B

$(N) = N^3$ milliseconds to process N data items. Analyze the software packages and select the correct statement(s).

Options :

6406531512402. ✔ Software package A is slower than Software package B for inputs in the range $N \in [0,3]$

6406531512403. ✖ Software package B is slower than Software package A for inputs in the range $N \in [0,3]$

6406531512404. ✖ Software package B is faster than Software package A for all $N > 3$.

6406531512405. ✔ Time taken by both the software packages A and B is the same when $N = 3$.

Question Number : 78 Question Id : 640653454774 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 Selectable Option : 0

Question Label : Multiple Select Question

Consider the following Python code snippet.


```

from flask import Flask, abort, redirect, url_for, render_template
app = Flask(__name__)

data_science = ['ML-techniques', 'ML-foundations', 'PDSA']
programming = ['Java', 'MAD-I', 'System-Commands', 'ML-practices']

@app.route('/courses/<course>')
def find_course(course):
    if course in data_science:
        return f"<h2>Data Science course found, {course}!</h2>"
    elif course in programming:
        return f"<h2>Programming course found, {course}!</h2>"
    else:
        abort(401)

@app.errorhandler(401)
def page_not_found(error):
    return "<h2>No course found!<h2>"

app.run()

```

If the above application is running locally on URL: <http://127.0.0.1:5000>, select the correct statement(s).

Options :

For the URL, “<http://localhost:5000/courses/PDSA>”, the browser will render:

6406531512406. ✖ **Programming course found, ML-techniques!**

For the URL, “<http://localhost:5000/courses/ML-practices>”, the browser will render:

6406531512407. ✖ **Data Science course found, ML-practices!**

For the URL, "http://localhost:5000/courses/MAD-2", the browser will render:

6406531512408. ✓ **No course found!**

For the URL, "http://localhost:5000/courses/Java", the browser will render:

Programming course found, Java!

6406531512409. ✓

Question Number : 79 Question Id : 640653454778 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 Selectable Option : 0

Question Label : Multiple Select Question

Consider the following two tables, user1 and logstable:

user1:

userid	username	password
U1	Mack	UabZa
U2	Jack	ZeFad
U3	Shaun	UsTZb

logstable:

logid	userid	logname
1	U1	Playing
2	U2	Studying
3	U3	Swimming
4	U1	Running
5	U3	Studying
6	U2	Dancing

Which of the following query/ queries will return the log ID and log name, which are created by user 'Shaun'?

Options :

6406531512422. ✓

```
select logid, logstable.logname from user1 inner join logstable on  
user1.userid = logstable.userid where user1.username = 'Shaun'
```

6406531512423. ✓

```
select logid, logstable.logname from user1 natural join logstable  
where user1.username = 'Shaun'
```

6406531512424. ✗

```
select logid, logstable.logname from user1 inner join logstable on  
user1.username = logstable.logname where user1.username = 'Shaun'
```

6406531512425. ✖

```
select logid, logstable.logname from user1, logstable WHERE  
user1.username = 'Shaun'
```

Sub-Section Number : 8
Sub-Section Id : 64065365712
Question Shuffling Allowed : No
Is Section Default? : null

Question Id : 640653454759 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 : (80 to 81)

Question Label : Comprehension

Consider the following jinja2 template, and answer the given subquestions.

```
from jinja2 import Template  
  
temp = """  
    Data science combines {{a}} abilities and competence in  
    {{b}}, {{c}} to draw important insights from data.  
    """  
  
to_render = Template(temp)  
  
out = to_render.render(data)  
print(out)
```

Sub questions

Question Number : 80 Question Id : 640653454760 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 output on the terminal for:

```
data = {'a': 'programming', 'b': 'mathematics', 'd': 'statistics'}
```

Options :

Data science combines programming abilities and competence in mathematics, statistics to draw important insights from data.

6406531512362. ✖

Data science combines programming abilities and competence in mathematics and statistics to draw important insights from data.

6406531512363. ✖

Data science combines programming abilities and competence in Mathematics, to draw important insights from data.

6406531512364. ✔

KeyError: 'c'

6406531512365. ✖

Question Number : 81 Question Id : 640653454761 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 output on the terminal for:

```
data = { 'b': 'mathematics', 'c': 'statistics', 'd': 'programming'}
```

Options :

Data science combines {{a}} abilities and competence in mathematics, statistics to draw important insights from data.

6406531512366. ✖

6406531512367. ✖

Data science combines programming abilities and competence in mathematics, statistics to draw important insights from data.

6406531512368. ✔

Data science combines abilities and competence in mathematics, statistics to draw important insights from data.

6406531512369. ✖

KeyError: 'a'

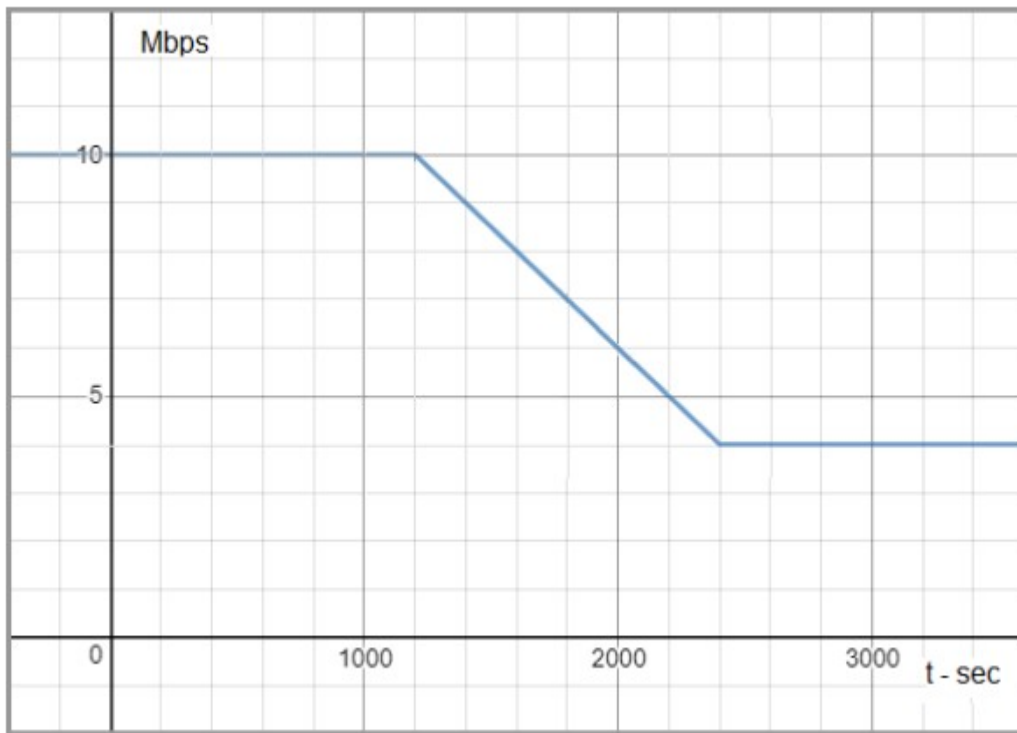
Sub-Section Number :	9
Sub-Section Id :	64065365713
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653454770 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 : (82 to 83)

Question Label : Comprehension

Consider the below graph, and answer the given subquestions.

The bandwidth vs. time graph for a period of one hour between 12 noon to 1 p.m in the afternoon is shown below. [Use relations: 1 Byte = 8 bits, 1 GB = 1000 MB and so on.]



Sub questions

Question Number : 82 Question Id : 640653454771 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

What is the network bandwidth (in Mbps) of the network at exactly 12:30 pm?

Options :

6406531512394. ✖ 5

6406531512395. ✖ 6

6406531512396. ✔ 7

6406531512397. ✖ 8

Question Number : 83 Question Id : 640653454772 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

What is the total amount of data (in GigaBytes) consumed by the only user connected to the network between 12:15 pm to 12:30 pm? [Assuming that the user is using the entire bandwidth from 12:15 p.m to 12:30 p.m]

Options :

6406531512398. ✖ 81

6406531512399. ✖ 8.1

6406531512400. ✔ 1.0125

6406531512401. ✖ 10.125

Sub-Section Number :	10
Sub-Section Id :	64065365714
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653454763 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 : (84 to 85)

Question Label : Comprehension

Consider the below model definitions, and answer the given subquestions.

Consider the following model classes “Movies” and “Producers” corresponding to tables “movies” and “producers”, respectively, in the SQLite database.


```

class Movies(db.Model):
    id = db.Column(db.Integer(), primary_key = True)
    movie_name = db.Column(db.String(50), nullable = False, unique = True)
    movie_year = db.Column(db.Integer, nullable = False)
    producers = db.relationship('Producer', backref = 'movie', secondary = 'groups')

class Producer(db.Model):
    id = db.Column(db.Integer(), primary_key = True)
    producer_name = db.Column(db.String(50), nullable = False, unique = True)
    productions = db.Column(db.Integer())

class Groups(db.Model):
    movie_id = db.Column(db.Integer(), db.ForeignKey('movies.id'), primary_key = True)
    prod_id = db.Column(db.Integer(), db.ForeignKey('producer.id'), primary_key = True)

```

Sub questions

Question Number : 84 Question Id : 640653454764 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 tables “movies” and “producers” are related to each other by which of the following relationships

Options :

6406531512374. ✖ One-to-one

6406531512375. ✖ One-to-many

6406531512376. ✔ Many-to-Many

6406531512377. ✖ Many-to-One

Question Number : 85 Question Id : 640653454765 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 Selectable Option : 0

Question Label : Multiple Select Question

If an object "p1" that represents an existing record in the table "producer" is defined as `p1 = Producer.query.get(2)`, The correct way to create a new record in the "movies" table that is produced by the producer represented by object 'p1' using terminal is.

Options :

6406531512378. ✓

```
>>> mov = Movies(movie_name = 'The movie', movie_year = 2001)
>>> p1.movie.append(mov)
>>> db.session.commit()
```

6406531512379. ✓

```
>>> mov = Movies(movie_name = 'The movie', movie_year = 2001)
>>> mov.producers.append(p1)
>>> db.session.commit()
```

6406531512380. ✖

```
>>> mov = Movies(movie_name = 'The movie', movie_year = 2001,
producers = p1)
>>> db.session.add(mov)
>>> db.session.commit()
```

6406531512381. ✖

```
>>> mov = Movies(movie_name = 'The movie', movie_year = 2001)
>>> p1.producers.append(mov)
>>> db.session.commit()
```

Sub-Section Number :

11

Sub-Section Id :

64065365715

Question Shuffling Allowed :

No

Is Section Default? :

null

Question Id : 640653454766 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 : (86 to 88)

Question Label : Comprehension

Consider the below program, and answer the given subquestions, if the application is running locally on URL: <http://127.0.0.1:5000>.

Consider the following resource created with help of flask-restful.

```
parser = reqparse.RequestParser()
parser.add_argument('employee_id')
parser.add_argument('employee_name')

r_fields = {"Name":fields.String(attribute = 'employee_name')}

class TestAPI(Resource):

# =====
# GET-FUNCTION
# =====
# =====
# POST-FUNCTION
# =====
    @marshal_with(r_fields)
    def put(self):
        this_emp = parser.parse_args()
        return this_emp

api.add_resource(TestAPI, "/api/v1", "/api/v1/<employee_id>")
```

Sub questions

Question Number : 86 Question Id : 640653454767 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 the curl request shown below.

```
curl http://127.0.0.1:5000/api/v1/5001 -X GET
```

retrieves the `employee_id` only with status `200` OK, what will come in place of GET-FUNCTION in the code?

Options :

6406531512382. ✖

```
def get(self):  
    return {'employee_Id': employee_id}
```

6406531512383. ✔

```
def get(self, employee_id):  
    return {'employee_Id': employee_id}
```

6406531512384. ✖

```
def get(self):  
    args = parser.parse_args()  
    return {'Id_no.': args['employee_id']}
```

6406531512385. ✖

```
def get(self):  
    args = parser.parse_args()  
    return args
```

Question Number : 87 Question Id : 640653454768 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 the curl request shown below.

```
curl http://127.0.0.1:5000/api/v1 -X POST -d '{"employee_id": "2003",  
"employee_name": "Suresh"}' -H "Content-Type: application/json"
```

retrieves the `employee_id` only with status 200 OK, what will come in place of POST-FUNCTION in the code?

Options :

```
def post(self):  
    return {'employee_Id': employee_id}
```

6406531512386. ✖

```
def post(self, employee_id):  
    return {'employee_Id': employee_id}
```

6406531512387. ✖

```
def post(self):  
    args = parser.parse_args()  
    return {'Id_no.': args['employee_id']}
```

6406531512388. ✔

```
def post(self):  
    args = parser.parse_args()  
    return args
```

6406531512389. ✖

Question Number : 88 Question Id : 640653454769 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

What will be the response from the server for the request:

```
curl http://127.0.0.1:5000/api/v1 -X PUT -d '{"employee_id": "2003",  
"employee_name": "Suresh"}' -H "Content-Type: application/json"
```

Options :

```
{  
  "employee_id": "2003",  
  "employee_name": "Suresh"  
}
```

6406531512390. ✖

```
{  
  "employee_name": "Suresh"  
}
```

6406531512391. ✖

```
{  
  "employee_id": "2003"  
}
```

6406531512392. ✖

6406531512393. ✔ None of these

TDS

Section Id :	64065329420
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	47
Number of Questions to be attempted :	47
Section Marks :	50