



# Shorts



Roll No. \_\_\_\_\_

ESE - DECEMBER-2022

PG Program: MCA

Subject Name: Python

Paper Code:

MCA

Time- 3 Hrs

Max Marks: 60

9

All Sections are compulsory.

Instructions to candidates

Section A contains 10 Very Short Answer Type questions carrying weightage of 1 marks each  
 Section B contains 4 Short Answer Type questions carrying weightage of 5 marks each.

Section C contains 2 Descriptive Answer Type questions carrying s weightage of 10 marks each.

SECTION A**Q.1 Attempt all questions (ALL CO1)**

(10 × 1) = 10

Dislike

Define the following:

- (a) List of immutable types in Python?
- (b) keyword used to refer to the current instance (object) of a class?
- (c) Way to initialize methods in a class?
- (d) Output of the code not(10<20) and not(10>30).
- (e) List in Python?
- (f) List of membership operators in Python?
- (g) Else in loop.
- (h) List of break statements.
- (i) Block comments.
- (j) List of Python collections.



0



Share



Remix



@univer...

Subscribe



## Python exam paper 2022 | BCA, MCA, IT | shorts |



## Subscriptions

### SECTION B

**Q.2 Attempt any four****4 × 5) = 20**

- (a) Describe single and multi-line comments? Distinguish multiline comment and multiline string in Python.

**OR**

Define module? Illustrate the process of designing user defined modules with an example.

- (b) Consider the following list

L = [1, 7, 9, 12, 16]

Analyze the output of the following commands:

- (i) L[0:3]    (ii) L[:1]    (iii) L[-1:-4]    (iv) L[-1]    (v) [4:]

**OR**

Illustrate the different methods to copy elements of a list to another list with a proper example.

- (c) Consider the list L = [5,4,7,3,6,2,1] and apply the Python code to evaluate the following operation with and without using built-in methods:

- (i) Insert an element 9 at the beginning of the list  
 (ii) Insert an element 8 at the end of the list.  
 (iii) Insert an element 8 at the index position 3 of the list.  
 (iv) Delete an element at the beginning of the list.  
 (v) Delete an element at the end of the list.

**OR**

- (a) Evaluate the following operations on sets

- A = {1,3,8,4,9,5}    B = {2,4,6,8,10}
- |                          |                  |                |
|--------------------------|------------------|----------------|
| (1) Union                | (2) Intersection | (3) difference |
| (4) symmetric_difference | (5) isdisjoint() |                |

- (d) Create a program to using function to find the sum of first 'n' even numbers and print the result.

**OR**

Create a Python program to reverse a string if its length is a multiple of 4.

**Share**

@univer...

**Subscribe****Remix**

# Python exam paper 2022 | BCA, MCA, IT | shorts |



Home



Shorts



Subscriptions



Library





# Shorts



## SECTION C

### Subscriptions

#### Q.3 Attempt any two

(2 × 15) = 30

- (a) (i) Explain the +ve and -ve index on string? What is the signification of  
 (ii) using -ve indexes.  
 (iii) "Strings are mutable in nature". Explain your answer with proper example.

OR

- (i) Describe the loops in Python with an example?  
 (ii) Explain lambda function with an example?

- (b) Illustrate the principles of Object-Oriented programming with proper example?

OR

- (i) Demonstrate the use of slicing operator in list?  
 (ii) Determine the commands used to read and write into a file with examples?

Dislike



0



Share



Remix



@univer...

Subscribe

Python exam paper 2022 |  
 BCA, MCA, IT | shorts |





# Shorts



## Subscriptions

170853

5th Sem. / Computer Engg.  
Subject : Python Comp. Prof. Using Python  
M.M. : 100

Time : 3 Hrs.



141

### SECTION-A



Dislike



2



Share

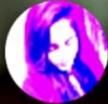
- Note:** Objective type questions. All questions are compulsory (10x1=10)  
(Course Outcome/CO)
- Q.1 Define ASSERT statement. (CO-2)
- Q.2 ^ Searches string in the given expression form the \_\_\_\_\_ (CO-4)
- Q.3 Write the extension of the module file in Python. (CO-2)
- Q.4 Write the use of function OPEN (). (CO-5)
- Q.5 Len (tuple) function returns \_\_\_\_\_ (CO-10)
- Q.6 Min (list) function shows \_\_\_\_\_ (CO-10)
- Q.7 Define comment in Python. (CO-2)

(1)

170853



Remix



@divya...

Subscribe



python Question paper  
5th sem



# Shorts



## Subscriptions

Q.8 Zero Division Error is an \_\_\_\_\_

(CO-7)

Q.9 Expand OOPS.

(CO-9)

Q.10 Define Polymorphism.

(CO-8)

## SECTION-B

141

Note: Very Short answer type questions. Attempt any ten parts

10x2=20

Q.11 Define Union Operation on sets.

(CO



Q.12 Write two keywords used in Python.

(CO-1)

Dislike

Q.13 Define Inheritance.

(CO-9)

Q.14 Name type of constructors in python.

(CO



Q.15 Define Filters.

(CO-8)

Q.16 List any two operators of Python.

(CO-2)

Q.17 Lower() function outputs \_\_\_\_\_

(CO-5)



Q.18 Define Module.

(CO-5)

Q.19 Write the use of DIR function in python.

(CO-4)

Share

Q.20 What is TRY Statement?

(CO-5)



Q.21 Write the use of Assert statement.

(CO-2)



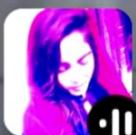
Remix



@divya...

Subscribe

python Question paper  
5th sem





# Shorts



## Subscriptions

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions.  $8 \times 5 = 40$

Q.23 Define List and its three operations. (CO-10)

141

Q.24 Briefly explain Dictionary. How it is created in Python? (CO-5)

Q.25 Write in brief about history of Python. (CO-1)

Q.26 Write a program of find the largest of three numbers. (CO-2)

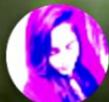
Q.27 Explain while loop in python. (CO-7)

Q.28 Explain SYS module used in python. (CO-7)

Q.29 What is Exception? How it is handle in python? (CO-7)

Q.30 Describe file and how it is opened in python. (CO-8)

Q.31 Write the special characters used in a regular expression. (CO-10)



@divya...

**Subscribe**

170853

Remix

python Question paper  
5th sem





# Shorts



## Subscriptions

Q.32 Explain the greedy match in Python. (CO-10)

### SECTION-D

**Note:** Long answer type questions. Attempt any three questions.  $3 \times 10 = 30$



Q.33 Define Tuples in Python. Explain various operation of Tuples (CO-9) 141

Q.34 Explain class and objects. How it is implemented in Python. (CO-9)



Q.35 How a function is created in Python. Explain the procedure to execute the function with example. Dislike (CO-5)

Q.36 Explain the following :-



a) Simple character matching in python. 2  
(CO-10)

b) Difference between OOP and Procedural Programming. (CO-9)



(Note: Course outcome CO is for office use only)

Share



@divya...

Subscribe



Remix

python Question paper  
5th sem





# Shorts



Roll No.



## Subscriptions

BCA-3001

2023-2024

**BCA (Third Semester)  
EXAMINATION, Jan., 2023**

Paper First

PYTHON PROGRAMMING

Time : Three Hours /

Note : Attempt questions from all sections as directed.

**Inst.** : The candidates are required to answer only in serial order. If there are many parts of a question, answer them in continuation.

Section—A

(Short Answer Type Questions)

Note : All questions are compulsory. Each question carries 3 marks.

- I. (A) Briefly explain about Python IDLE.
- (B) Explain about logical operator and Boolean expression.
- (C) Write a program to check a given number is prime or not. Number is given by user.
- (D) Write a program to print Armstrong numbers from 100 to 200.
- (E) Write the difference between List and Tuple.
- (F) What is module and package in python?
- (G) What is generator in python explain with example.
- (H) Why do we need a date class in python.
- (I) How can you raise an exception in python explain with example.



23



Dislike



28



Share



Remix



@Ronic\_...

Subscribe

48MP AI QUAD CAMERA  
Shot by xiaomi

python programming  
questions paper 2023 BCA  
semester 3 BCA3001





# Shorts



## Subscriptions

Section—B

### (Long Answer Type Questions)

Note : Attempt any two questions. Each question carries 12 marks (04 marks each part).

2.

- (a) What is Python programming cycle?
- (b) What are the rules for local and global variable in python?
- (c) Write 4 characteristics of python programming language.

3.

- (a) Explain the need for continue, break and pass statements.
- (b) Write a program in python where these three statements are implemented.
- (c) Why python is called interpreted language.

4.

- (a) What is dictionary in python?
- (b) Write a Python program to convert a given dictionary into a list of lists.
- (c) Write 4 basic operations of dictionary with example.



23



Dislike

Section—C

### (Long Answer Type Questions)

Note : Attempt any two questions. Each question carries 12 marks (06 marks each part).

5.

- (a) Explain about String datatype in python. What is slicing and indexing?
- (b) What is negative indexing? Give 4 examples of slicing and indexing with negative indexing.

28

6.

- (a) Explain about functions in python? Explain all types of functions used in python.
- (b) Write a Python function to calculate the average value of the numbers in a given tuple.

28

7.

- (a) What is time module? Explain five function of time module with example.
- (b) Write a Python program to subtract five days from current date.

Share

8.

- (a) What is exception? Explain about try, except, else and finally blocks used in exception handling.
- (b) Write a user defined exception using class.



Remix



@Ronic\_...

Subscribe



python programming  
questions paper 2023 BCA  
semester 3 BCA3001



# Shorts



# Python

Printed Page 1 of 2

Paper No. 199344

Roll No.

Sub Code: KNC302

B. TECH.

(SEM III) THEORY EXAMINATION 2019-20

PYTHON PROGRAMMING

Time: 3 Hours

Total Marks: 100

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

## SECTION A

## 1. Attempt all questions in brief.

2 x 10 =

Qno	Question	Marks	CO
a.	What is the difference between list and tuples in Python?	2	CO1
b.	In some languages, every statement ends with a semi-colon (;). What happens if you put a semi-colon at the end of a Python statement?	2	CO2
c.	Mention five benefits of using Python.	2	CO4
d.	How is Python an interpreted language?	2	CO2
e.	What type of language is python?	2	CO1
f.	What are local variables and global variables in Python?	2	CO2
g.	What is the difference between Python Arrays and lists?	2	CO4
h.	Define ADT interface.	2	CO4
i.	Define floor division with example.	2	CO5
j.	Differentiate Fruity functions and void functions.	2	CO4



Dislike

## SECTION B

## 2. Attempt any three of the following:

3 x 10 =

Qno	Question	Marks	CO
a.	Explain iterator. Write a program to demonstrate the tower of Hanoi using function.	10	
b.	Discuss function in python with its parts and scope. Explain with example. (Take Simple calculator with add, subtract, Division and Multiplication).	10	CO3
c.	Discuss ADT in python. How to define ADT? Write code for a student information.	10	CO4
d.	Explain all the Conditional statement in Python using small code example.	10	CO2
e.	What is Python? How Python is interpreted? What are the tools that help to find bugs or perform static analysis? What are Python decorators?	10	



## SECTION C

## 3. Attempt any one part of the following:

1 x 10 = 10 Share

@parma

Subscribe

Marks	CO
10	CO1
10	CO2



BTech python papar||

btech2year ||aktu

python papar||2019-20||

2020-2021||python papar

Remix

Edit &amp; Share

XW/L





# Shorts



Printed Page 2 of 2

Sub Code: KNC302

Paper Id: 199344

Roll No:        

Ques.	Question	Marks	CO
a.	Explain Expression Evaluation & Float Representation with example. Write a Python Program for How to check if a given number is Fibonacci number.	10	CO2
b.	Explain the purpose and working of loops. Discuss Break and continue with example. Write a Python program to convert time from 12 hour to 24-hour format.	10	CO1

5. Attempt any one part of the following: 1 x 10 = 10

Ques.	Question	Marks	CO
a.	Explain higher order function with respect to lambda expression. Write a Python code to Count occurrences of an element in a list.	10	CO3
b.	Explain Unpacking Sequences, Mutable Sequences, and List Comprehension with example. Write a program to sort list of dictionaries by values in Python – Using lambda function.	10	

6. Attempt any one part of the following: 1 x 10 = 10

Ques.	Question	Marks	CO
a.	Discuss File I/O in python. How to perform open, read, write, and close into a file? Write a Python program to read a file line-by-line store it into a variable.	10	CO4
b.	Discuss Exceptions and Assertions in python. How to handle Exceptions with Try-Finally? Explain 5 Built-in Exceptions with example.	10	

7. Attempt any one part of the following: 1 x 10 = 10

Ques.	Question	Marks	CO
a.	Discuss and differentiate Iterators & Recursion. Write a program for Recursive Fibonacci series.	10	CO5
b.	Discuss Sorting & Merging. Explain different types of sorting with example. Write a Python Program for Sieve of Eratosthenes.	10	CO5

Dislike

Share



@parma...

Subscribe

BTech python papar||  
 btech2year ||aktu  
 python papar||2019-20||  
 2020-2021||python papar



Remix

2 | Page



Home



Shorts



Subscriptions



Library





# Shorts



PAPER ID:411312

Printed Page: 1 of 2  
Subject Code: KNC302

Roll No: \_\_\_\_\_

BTECH

(SEM III) THEORY EXAMINATION 2021-22

PYTHON PROGRAMMING

Time: 3 Hours

Total Marks: 50

Note: Attempt all Sections. If you require any missing data, then choose suitably.

## SECTION A

1. Attempt all questions in brief.

2\*5 = 10

Qno	Questions	CO
(a)	Explain the Programming Cycle for Python in detail.	1
(b)	What will be the output of the following Python code? <pre>i = 0 while i &lt; 3:     print()     i += 1 else:     print(0)</pre>	2
(c)	What will be the output of the following Python code? <pre>def cube(x):     return x * x * x x = cube(3) print(x)</pre>	3
(d)	How do we define an Interface for an ADT?	4
(e)	How do you perform a search in Python?	5



179



Dislike

## SECTION B

2. Attempt any three of the following:

5\*3 = 15

Qno	Questions	CO
(a)	What do you mean by Python IDE? Explain in detail.	1
(b)	How can you randomize the items of a list in place in Python?	2
(c)	Explain Tuples and Unpacking Sequences in Python Data Structure.	3
(d)	What are File input and output operations in Python Programming?	4
(e)	Solve the Tower of Hanoi problem for n= 3 disk and show all the steps.	5



4

## SECTION C

3. Attempt any one part of the following:

5\*1 = 5

Qno	Questions	CO
(a)	Write a program in Python to execute the Selection sort algorithm.	5
(b)	Explain why python is considered an interpreted language.	1



Share

4. Attempt any one part of the following:

5\*1 = 5

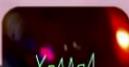
Qno	Questions	CO
(a)	Write a Python program to construct a linked list.	2

Subscribe



Remix

BTech:python papar||  
 btech2year ||aktu  
 python papar||2019-20||  
 2020-2021||python papar





# Shorts



Printed Page: 2 of 2

Subject Code: KNC302

PAPER NO. 1001

SUBJECT

601 Y0

--	--	--	--	--	--	--	--	--	--

**BTECH  
(SEM III) THEORY EXAMINATION 2021-22  
PYTHON PROGRAMMING**



		<span style="font-size: 2em;">4</span> <span style="font-size: 1.5em;">179</span>
	(b) Write a program to produce Fibonacci series in Python.	

**Attempt any one part of the following:****5\*1 = 5**

Qno	Questions	CO
(a)	Write a Python program to change a given string to a new string where the first and last chars have been exchanged.	3
(b)	Write a Python program to add an item in a tuple.	3

**Attempt any one part of the following:****5\*1 = 5**

Qno	Questions	CO
(a)	How to create and import a module in Python?	4
(b)	Explain the algorithm Sieve of Eratosthenes used in Python Programming.	4

**Attempt any one part of the following:****5\*1 = 5**

Qno	Questions	CO
(a)	Write a Recursive function in python BinarySearch( <i>Arr,L,R,X</i> ) to search the given element <i>X</i> to be searched from the List <i>Arr</i> having <i>R</i> elements, where <i>L</i> represent slower bound and <i>R</i> represents the upper bound.	5
(b)	Explain the terms Merge List and Merge Sort in Python Programming.	5

**Share**

@parma...

**Subscribe**

**BTech python papar||  
btech2year ||aktu  
python papar||2019-20||  
2020-2021||python papar**

**Remix**



# Shorts



SUNNY  
BCA (Sem-III) - CC-5 (Python Prog)



Subscriptions  
2021

Full Marks : 70

Time : 3 hours

The figures in the right-hand margin indicate marks

Answer all Sections as directed

317

Section—A

(Objective Type Questions)

1. Select the correct answers of the following : 5×1

Dislike

(a) In order to store values in terms of key and values you use which core data type?

- (i) list
- (ii) tuple
- (iii) class
- (iv) dictionary

(b) What will be the output of the following python code?

```
print ("abcdef".find("cd")) == "cd" in "abcdef"
```

- (i) True

KI(211)-300

(Turn Over)

5



Share



Remix



@patna...

Subscribe

#Bca#3sem#Python  
question paper





# Shorts



(2)



## Subscriptions

(iii) Error

(iv) None of these

(c) What is the output when you execute list ("hello")?

(i) ['h', 'e', 'l', 'l', 'o']

(ii) ['hello']

(iii) ['lo']

(iv) ['olleh']



317

(d) Which of the following is not the correct syntax for creating a set?

Dislike

(i) Set([1,2],[3,4]))

(ii) Set([1,2,2,3,4])

(iii) Set((1,2,3,4))

(iv) {1,2,3,4}



5

(e) Which of the following statements is not true?



(i) A non-private method in a superclass can be overridden

(ii) A derived class is subset of superclass

Share

K1(211)

(Contd.)



@patna...

Subscribe

Remix

#Bca#3sem#Python  
question paper

(3)



(iii) The value of a private variable in the superclass can be changed in the subclass

(iv) When invoking the constructor from a subclass the constructor of superclass is automatically invoked

## 2. Fill in the blanks of the following : 5\*1

317

(a) The Python source code is converted to byte by the interpreter.

(b) Python's floating point counters 14,7 bytes.

(c) The Python statement `list(range(1,10,3))` executed as —.

Dislike

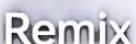
5

(d) Global variable can be defined inside the function by the keyword global.

(e) The base class for Python built in exception class is —.

Share

Turn Over



Remix



@patna...

Subscribe

#Bca#3sem#Python  
question paper





(4)



## Section—B

### (Short Answer Type Questions)

Answer any four questions of the following : 4×5

~~3.~~ Differentiate between Java and Python.

~~4.~~ Discuss built-in data type in Python.

~~5.~~ Consider the following list :

li = [1,7,9,12,16] give the output of the following commands

(a) Li[0:3]

(b) Li[0:-1]

(c) Li[::-1]

(d) Li[-1:-4] (6,12,9)

~~6.~~ What is array in Python? State and explain the advantages of using an array in Python.

~~7.~~ Explain instance method, class method and static method in detail giving suitable example.

~~8.~~ Write a Python code to check a given number in Armstrong number or not.



@patna...

Subscribe

Share

(Continued)

#Bca#3sem#Python  
question paper





( 5 )



## Section-C

## (Long Answer Type Questions)

Answer any four questions of the following :

4×10



317

**9.** What are exceptions in Python? Discuss the exception handling mechanism giving suitable example.

**10.** What is class? Discuss the following concepts with respect to a class in Python :

- (a) The self-variable
- (b) Constructor
- (c) Instance variable.

Dislike



5

**11.** Explain in detail about Python files, its type, functions and operations that can be performed on files with example.

Share



**12.** What types of conditional structures are present in a programming language? How many of them are supported in Python? Explain with example.



@patna...

Subscribe

Turn on Reminders

K1(211)

#Bca#3sem#Python  
question paper





( 6 )

~~13.~~ Create a rectangle class, write Python code to check the area of the first rectangle is greater than the second by overloading '>' operator.



~~14.~~ Write Python code to multiply two matrices using nested loops and also perform transpose of the resultant matrix.



\*\*\*

Dislike

```
for i in range (2,20,2)  
    print(i)
```

5



@patna...

Subscribe

Remix

#Bca#3sem#Python  
question paper



K1(211)—300

BCA (Sem III) – CC-5 (Python Prog)

  
Home  
Shorts  
Subscriptions  
Library

## Important questions

# AKTU ➔ Python Programming Imp Ques

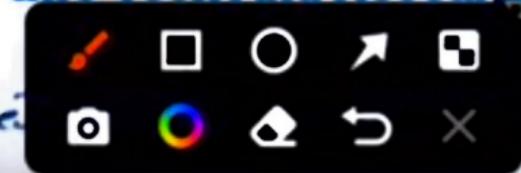
### Unit-1 Introduction

- 1) Element of python and interacting with python programs
- 2) Type conversion and Assignment statement
- 3) Operator Precedence & Boolean Expression

### Unit-2 Conditionals.

- 1) Nested-if Statement and Elif statement

Info Tech And Research



Subscribe



## Important questions

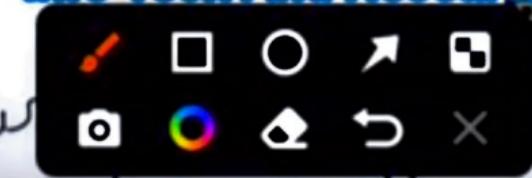
3) Operator Precedence of Boolean Expression

Unit-2) Conditionals.

- 1) Nested-if Statement and Elif statement in Python.
- 2) Expression of Float Representation.
- 3) Purpose and working of Loops and Nested Loops.
- 4) Break and continue.

Unit-3) Function, String , Data Structures

Info Tech And Research



Subscribe



## Important questions

4) Break and continue.

Unit-3) Function, String , Data Structure ..

- 1) Parts of A function and Execution of A function.
- 2) Length of the string and perform concatenation & Repeat operations.
- 3) Unpacking sequence and mutable sequence
- 4) Lambda Expression & Ternary function

Info Tech And Research



Subscribe



## Important questions

### 4) Lambda Expression & Trick function

Unit-4)

whose algo is known as sieve of eratosthenes.

- 1) Whose algo is known as sieve of eratosthenes.
- > Importing Modules.
- 3) class definition and class etc.
- 4) Inheritance and oop.

Info Tech And Research

Subscribe

## Important questions

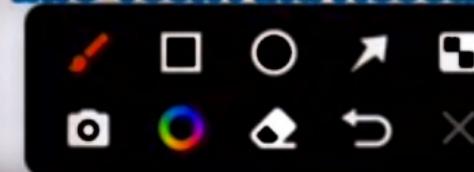
### Unit-5

- 1) Simple search and Estimating Search Time.
- 2) Binary search and Estimating Binary search Time,
- 3) Selection sort & Merge sort or High order sort.

### Other Imp programs

- 1) write simple program in python
- 2) i/p / o/p with files in python
- 3) Fibonacci series

Info Tech And Research



Subscribe

## Important questions

Programs in Python Order 100.

Other Imp programs

1) write simple program in python

2) i/p / output with files in python

3) Fibonacci series

4) Printing pyramid, rectangle, right angle Triangle.

Info Tech And Research



Subscribe

arguments which were entered.

[8+7]

Describe how programmers can generate exceptions within their code.

Write a program to handle arithmetic exception.

[8+7]

What strings will be matched with the following regular expression pattern

- i) ^From
- ii) ^Subject:his
- iii) \bthe\b
- iv) \Bthe

Write a multithreaded application, to execute thee recursive functions – Fibonacci, factorial, summation.

[6+9]

Create a simple text editor using Tkinter and Python. A file can be created from scratch or read and displayed into a text widget which can be edited by the user. When the user quits the application, the user is prompted whether to save the changes.

[15]

Write a Python script to implement a crawler, an advanced Web client.

[15]

Explain the functionality of object relational manager.

How to perform CRUD operations on a database table using Python? Give scripts.[7+8]

Compare Python with Java, C++.

What is a module? How to import it? How to call a module function or access a module variable?

[ 7+8 ]

Develop a Python application which looks for a search word in a file and displays each matching line as well as a summary of how many matching lines were found and give an analysis of your program.

[ 15 ]

What is pickling? How is it performed? Give example.

Why are command-line arguments useful? Write code to display the command-line arguments which were entered.

[ 8+7 ]

Describe how programmers can generate exceptions within their code.

Write a program to handle arithmetic exception.

[ 8+7 ]

What strings will be matched with the following regular expression pattern

**Formulate the regular expressions pattern for the following:**

- i) words which starts with 'the'
  - ii) matches only with word 'the'
  - iii) any string which contains 'the' but does not begin with 'the'.
- Differentiate between Lock and RLock objects. [8+7]

**Write a program to demonstrate multi threaded mechanism provided by thread module in python.** [15]

**Create a web crawler as an advanced web client using python modules.** [15]

**"SQLAlchemy provides more flexibility in issuing raw SQL"** Substantiate this statement.  
Discuss the following commonly used query methods: offset( ), filter\_by( ), order\_by( ).

[7+8]

**Compare Python with Java, C++.**

**What is a module? How to import it? How to call a module function or access a module**

Why are variable type declarations are not used? Justify your answer with examples.

Make a comparison of internal types: Ellipsis and Xrange.

[8+7]

Which python types are immutable? Explain with examples.

List built-in methods used for string comparison.

[7+8]

Write python program to append the content of second file to first file. [ read two file names as command line arguments]

Explain the python modules for serialization and persistency.

[10+5]

With an example discuss except statement with multiple exception.

Differentiate between importing and loading of a module.

[7+8]

Formulate the regular expressions pattern for the following:

i) words which starts with 'the'

ii) matches only with word 'the'

iii) any string which contains 'the' but does not begin with 'the'.

[8+7]

Differentiate between Lock and RLock objects

Consider a Python GUI program that produces a window with the following widgets using python code:

- a) A button to retrieve the next value in that list(if there is one).This button is displayed if there is no next value in the list
- b) A label to display the number of the items being displayed and the total number of items

[10]

OR

Give an overview and demonstration of building web applications using python's cgi module.

[10]

- i) What is a cursor object? Explain various methods and attributes of cursor object.
- What do you mean by a constructor? List and describe various constructors used for converting to different data types.

[5+5]

OR

Describe in detail about Python SQLAlchemy ORM with a case study of Employee role database.

[10]

How to declare and call functions in Python programs? Illustrate with an example script.

List and explain few most commonly used built-in types in python. [5+5]

OR

Summarize various operators, built-in functions and standard library modules that deals with Python's numeric type. [10]

Explain the following file built-in functions and method with clear syntax, description and illustration:

- a) open( )
  - b) file( )
  - c) seek( )
  - d) tell( )
  - e) read( )
- [10]

OR

How does try-except statement work? Demonstrate with an example python code.

Illustrate the concept of importing module attributes in python scripts. [5+5]

Examine how python supports regular expressions through the 're' module with brief introduction and various built-in methods related to it. [10]

OR

What is the motivation behind parallelism and state how python achieves parallelism?

Explain briefly about thread and threading module objects in Python. [3+7]

- 02- Write a python program to print all primes smaller than or equal to n using sieve of Eratosthenes.
- 03- Discuss file I/O in python. How to perform open, read, write and close in to a file.
- 04- Explain AOT with its types.
- 05- Explain AOT interface in python.
- 06- Define the term inheritance.

### Unit - 05

- 01- Explain iterator and tower of Hanoi problem in detail.
- 02- Differentiate b/w recursion and iteration.
- 03- Explain selection sort and merge sort with example.
- 04- Discuss binary search with syntax.
- 05- Discuss linear search with help of example.

example

- 05- What do you mean by expression evaluation or float representation with example.
- 06- Write a python program for how to check if a given no. is fibonacci number?

### Unit - 03

- 01- What do you mean by the term string ?
- 02- Discuss tuples ; How are tuples created in python?
- 03- what do you mean by set ? Explain the operations performs on sets.
- 04- what is ~~about~~ dictionary in python ? How we create the dictionary in python .
- 05- Explain lambda expression with syntax.

### Unit - 04

- 01- what is the sieve of Eratosthenes ? Explain with example.

important question of python

unit - 01 (most freq 5 question)



- 01- what is python? How python is interpreted language?
- 02- Discuss list and tuple data types in details.
- 03- what do you mean by operator precedence and associativity.
- 04- Define - Boolean expression element of python, type-conversion, operator precedence, programming cycle for python.
- 05- Discuss arithmetic and comparison operator with example.

Unit - 02

- 01- Explain all the conditional statement in python using small code example.
- 02- Write a python program to check if the input year is leap year or not.
- 03- Write a program to find out the number is even or odd.

7. (a) Discuss method overriding with an example. 7

(b) Describe class and instance variables with an example. 7

6. (a) Describe the following methods associated with the file object :

- (i) write
- (ii) writelines
- (iii) tell
- (iv) seek.

7

(b) Describe the need for catching exceptions using try and exception statements. 7

5. (a) Explain directory methods in python. 7  
(b) Discuss the basic operations performed  
on string. 7

### **Unit III**

6. (a) Describe the following methods  
associated with the file object :

python with example.

7

- (b) Describe mutable and immutable variables with example. 7

## Unit II

4. (a) Discuss the importance of package in python programming and explain how to import a package with an example. 7
- (b) What are list ? How to define and access the elements of list ? Also discuss the

2/2

operation on the list

Description

(vi) Inheritance

(vii) DDL operations.

**$7 \times 2 = 14$**

## **Unit I**

2. (a) Describe the features of Python. 7
- (b) Explain the identifiers, keywords, statements, expressions and variables in python programming with example. 7
  
3. (a) Explain the basic data types available in



question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Describe the following terms :
  - (i) Int, float and complex variables
  - (ii) Command line arguments
  - (iii) Global and local variable
  - (iv) Lamda function
  - (v) Read( ) and Readlines( ) function

Unit - 9 [Classes in Python]

Inheritance , Class , Instance , polymorphism ,  
method.

Unit - 10 [ Regular Expression ]

Quantifier , Pattern Matching , Grouping  
Regular Expression, (Syntax)

## Unit - 7 [Exceptions]

- ① What is an Error in Python?
- ② How python handle the exception with example
- ③ Explain Exception hierarchy.

## Unit - 8 [Input & output]

- ① Explain different types of access modes.
- ② Explain data streams.
- ③ How do we handle I/O exception.

## Unit 9 [Functions]

- ① Explain different type of functions.
- ② Explain map() function with example.
- ③ What are the Closures.
- ④ Explain function in python

## Unit 5 [modules]

- ① What are the modules in Python?
- ② What is the usage of Help() and dir() function in Python?

## Unit 2 [Basic Python Syntax]

- ① What are comments in Python
- ② Write a python program to calculate length of string

⊗

## Unit 3 [Language Components]

- ① What is the use of Indentation in Python
- ② Write a Python program to get Fibonacci Series between 0 to 50

Dictionary , List , Sets , tuples ← Unit - 4

## Unit 1 [Introduction to Python]

- ① Give the brief history of python.
- ② Explain TDE
- ③ Name any 5 reserved keywords in python
- ④ How can we install python in windows?
- ⑤ Write short note on Environment Variable.