Attendance Sheet

Course Name: Basis programming with Python and its application in database management, artificial intelligence and machine learning (AI/ML).

Date: 29/01/24 Practical Exam

Merit List Rank	NAME	ROLL NO	Attendance
ML01	Suvajit Bhunia	18901922102	Suvajit Bhunia
ML02	Santanu Das	18901922104	Santanu Das
ML03	Chayanika Kundu	18901922092	Chayanika Kundu
ML04	Kushal Saha	18901922088	Kushal Saha
ML06	Suman Jana	18901922081	Suman Jana
ML07	Samadrita Ghosh	18901922015	Samadrita Ghosh
ML08	Samprati Maity	18901922066	Samprati Maity
ML09	Surajeet Ghosh	18901922060	Surajeet Ghosh
ML10	Subham Dey	18901922033	A
ML11	Abhijit Khutia	18901922037	A
ML12	Munshi Aman Sahein	18901922036	Munshi Aman Sahein
ML13	Rintu Pal	18901922082	Rintu Pal
ML14	Ayan Mondal	18901922087	Ayan Mondal
ML15	Tutun Mandal	18901922003	Tutun Mandal
ML17	Ankit Das	18901922090	Ankit Das
ML18	Soumyadip Pal	18901922093	Soumyadip Pal
ML19	Debjit Chakrabarti	18901922075	A
ML20	Spandan Ghosh	18901922034	A
ML21	Saumyadip Kayal	18901922086	Saumyadip Kayal
ML22	Ritrisha Adhikary	18901922021	Ritrisha Adhikary
ML23	Manoj Kumar	18901922002	Manoj Kumar
ML24	Arpita Roy	18901922085	Arpita Roy
ML25	Souvick Maity	18901922100	Souvick Maity
ML26	Oindrila Nag	18901922007	Oindrila Nag
ML27	Rakhi Dhua	18901922018	Rakhi Dhua
ML28	Bishal Das	18901922084	Bishal Das
ML29	Shreyasi Maiti	18901922103	Shreyasi Maiti
ML30	Akash Routh	18901922010	Akash Routh
ML31	Nayan Dutta	18901922044	A
ML32	Agnik Khutia	18901922058	A
ML33	Prithwish Ghosh	18901922054	A
ML34	Soumen Khanra	18901922017	Soumen Khanra
ML35	Saikat Biswas	18901922079	A
ML36	Abhijit Ghosh	18901922035	Abhijit Ghosh
ML37	Tanmoy Datta	18901922038	Tanmoy Datta
ML38	Shreya Rout	18901922094	Shreya Rout
ML39	Subhadip Banerjee	18901922019	Subhadip Banerjee
ML40	Soumyadip Mahato	18901922074	Soumyadip Mahato
ML41	Sayan Bhattacharyay	18901922020	Sayan Bhattacharyay
ML42	Debleena Ghosh	18901922091	Debleena Ghosh

Prof. (Dr.) Sankar Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

29/01/24
Signature of Faculty

Attendance Sheet

Course Name: Basis programming with Python and its application in database management, artificial intelligence and machine learning (AI/ML).

Date: 29/01/2024 Theory Exam.

Merit List Rank	NAME	ROLL NO	Attendance
ML01	Suvajit Bhunia	18901922102	Suvajit Bhunia
ML02	Santanu Das	18901922104	Santanu Das
ML03	Chayanika Kundu	18901922092	Chayanika Kundu
ML04	Kushal Saha	18901922088	Kushal Saha
ML06	Suman Jana	18901922081	Suman Jana
ML07	Samadrita Ghosh	18901922015	Samadrita Ghosh.
ML08	Samprati Maity	18901922066	Samprati Maity
ML09	Surajeet Ghosh	18901922060	Surajeet Ghosh
ML10	Subham Dey	18901922033	A
ML11	Abhijit Khutia	18901922037	A
ML12	Munshi Aman Sahein	18901922036	Munshi Aman Sahein
ML13	Rintu Pal	18901922082	Rintu Pal.
ML14	Ayan Mondal	18901922087	Ayan Mondal.
ML15	Tutun Mandal	18901922003	Tutun Mondal
ML17	Ankit Das	18901922090	Ankit Das
ML18	Soumyadip Pal	18901922093	Soumyadip Pal
ML19	Debjit Chakrabarti	18901922075	A
ML20	Spandan Ghosh	18901922034	A
ML21	Saumyadip Kayal	18901922086	Saumyadip Kayal
ML22	Ritrisha Adhikary	18901922021	Ritrisha Adhikary
ML23	Manoj Kumar	18901922002	Manoj Kumar
ML24	Arpita Roy	18901922085	Arpita Roy
ML25	Souvick Maity	18901922100	Souvick Maity
ML26	Oindrila Nag	18901922007	Oindrila Nag
ML27	Rakhi Dhua	18901922018	Rakhi Dhua
ML28	Bishal Das	18901922084	Bishal Das.
ML29	Shreyasi Maiti	18901922103	Shreyasi Maiti
ML30	Akash Routh	18901922010	Akash Routh
ML31	Nayan Dutta	18901922044	A
ML32	Agnik Khutia	18901922058	A
ML33	Prithwish Ghosh	18901922054	A
ML34	Soumen Khanra	18901922017	Soumen Khanra
ML35	Saikat Biswas	18901922079	A
ML36	Abhijit Ghosh	18901922035	Abhijit Ghosh
ML37	Tanmoy Datta	18901922038	Tanmoy Datta
ML38	Shreya Rout	18901922094	Shreya Rout
ML39	Subhadip Banerjee	18901922019	Subhadip Banerjee
ML40	Soumyadip Mahato	18901922074	Soumyadip Mahato
ML41	Sayan Bhattacharyay	18901922020	Sayan Bhattacharyay
ML42	Debleena Ghosh	18901922091	Debleena Ghosh

29/1/24

29/01/24

Signature of Faculty

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

College of Pharma

Dr. B. C. Roy College of Pharmacy & AHS, Durgapur

Course Name : Basic Programming with Python and its application in database management, artificial intelligence and machine learning(AI/ML).

Exam Date : 29/01/2024

F.M : 60 **Time : 1.30 Hrs**

General Instructions : Question paper contains three groups A, B and C. Group A contains MCQ type questions with 1 marks each. Group B contains short answer type questions with 3 marks each and in Group C, you have to write Python program , carries 5 marks each.

A. choose the most appropriate answer from the options given below

1. Which type of Programming does Python support?
   a) object-oriented programming b) structured programming
   c) functional programming d) all of the mentioned

2. Is Python case sensitive when dealing with identifiers?
   a) no b) yes c) machine dependent d) none of the mentioned

3. Is Python code compiled or interpreted?
   a) Python code is both compiled and interpreted
   b) Python code is neither compiled nor interpreted
   c) Python code is only compiled
   d) Python code is only interpreted

4. What will be the value of the following Python expression?
   4 + 3 % 5
   a) 7 b) 2 c) 4 d) 1

5. Which of the following is used to define a block of code in Python language?
   a) Indentation b) Key c) Brackets d) All of the mentioned

6. Which of the following character is used to give single-line comments in Python?
   a) // b) # c) ! d) /*

7. What are the values of the following Python expressions?
   2**(3**2)
   (2**3)**2
   2**3**2
   a) 512, 64, 512 b) 512, 512, 512 c) 64, 512, 64 d) 64, 64, 64

8. What will be the output of the following code snippet?
   a = 3
   b = 1
   print(a, b)
   a, b = b, a
   print(a, b)
   a) 3 1 1 3 b) 1 3 3 1 c) 1 1 3 3 d) none of these

9. Which of the following declarations is incorrect in python language?
   a) xyzp = 5000000 b) x y z p = 5000 6000 7000 8000
   c) x,y,z,p = 5000, 6000, 7000, 8000 d) x_y_z_p = 5,000,000

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

10. print("javatpoint"[5:])
What will be the output of this code?

a) Javatpoint b) java c) point d) None of these

11.
```
a = True
b = False
c = False
if a or b and c:
   print ("ABC")
else:
   print ("abc")
```
a) abc b) ABC c) ABC abc d) abc ABC

12. Which of the following is the truncation division operator in Python?

a) | b) // c) / d) %

13. What will be the output:
```
a="10"
b="20"
c=a+b
print(c)
```
a) 30 b) 1020 c) 2010 d) none of these

14. How many times will Python execute the code inside the following while loop?
```
i = 0
while i < 0 and i > 2 :
   print ("Hello ...")
   i = i+1
```
a) 0 times b) 1 times c) 2 times d) infinite times

15. Extension of python file is:

a) .python b) .py c) .prog d) None of these

B. Answer the following questions:

1. Write the difference between :

(a) = and == (b) "and" and "or" (c) / and // (d) * and **

2. Rewrite the following for loop into while loop:
```
for a in range(25,500,25):
    print(a)
```

3. What is the significance of "else" in loop explain with example.

4. How many return statement can be used in a function? Explain with example.

5. Explain actual and formal arguments with example.

6. Write Python code to create a Dictionary and display the length of the dictionary.

7. What is the output of the following?

```
i = 1
while True:
    if i%7 == 0:
        break
        print(i)
    i += 1
```

a) 1 2 3 4 5 6 b) 1 2 3 4 5 6 7 c) error d) none of the mentioned

8. what will be the output if value of a is 5

```
def sum(a):
    a=a+10
    print(a)

a=int(input("enter a number"))
sum(a)
print(a)
```

9. Write python code to input a string and print the first and last character of it.

10. What will be the output?

```
for x in range(6):
    print(x)
else:
    print("Finally finished!")
```

C. Write python program for the following:

1. Cost of an apple is Rs. 10 and Mango is Rs. 8. You have purchased m and n number of Apples and Mangoes. You will get a discount of 2% if your purchase amount is more than Rs. 5000. Write a program to input the value of m and n and display the purchase amount, discount and net payable amount.

2. Input any 10 numbers in a list and display the maximum element.

3. Display the sum of all the numbers between 1 to 100 which are divisible by both 3 and 7.

Roy College of Pharmacy Durgapur

Prof. (Dr.) Satish Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy & AHS, Durgapur

Course name: Basic Programming with Python and its Application in Database Management, artificial intelligence and machine learning (AI/ML)

Exam Date: 19.09.2024

FM: 50 Time: 1 hr

(A) Answer any 8 questions (each contains 5 marks)

1. (a) How will you import Pandas and Numpy in Jupyter Notebook (write the commands only)?
   (b) ls=[1,2,3,4,5,6], convert this list to a Numpy array with a command and save that array as a. Remove the first element from this array and save as new_a. Convert new_a to a listnamed new_ls.2+3
2. (a) There is a .csv file named 'sample.csv' with numbers that looks like:

A
34
9
12
11
7

Import this .csv file as Numpy array and save as csv_array.

   (b) ls=[4,5,6,7]. Convert this to a Numpy array, save as a and change this to new_ls that will look like [16,25,36,49] (final output will be as a list).2+3
3. (a) A=[1,2,3,4] and B=[5,6,7,8]. Convert both these lists to two Numpy arrays and save as nA and nB. What will nA+nB, nA-nB and nA*nB look like?
   (b) Name nA+nB as newAB. newAB+3=? newAB*3=?newAB[newAB>5]=?
   2+3=5
4. Convert the following list of lists to a Numpy array and save as A. What will be A[0],A[2,1],A[:,0],A[0,0:3] and A[1,:]? ls=[[32, 15, 6, 9, 14], [12, 10, 5, 23, 1], [2, 16, 13, 40, 37]]
   5
5. ls=[1,2,3,4,5,6]. How will you determine maximum, minimum, mean, median, mode and standard deviation from this list with Numpy?
   5
6. How will you import Pandas in Jupyter Notebook (write the commands only)? Convert the following dictionary to a Pandas dataframe (named as df) using a command.
   dic={'Column_1':[1,2,3], 'Column_2':[4,5,6], 'Column_3':[7,8,9]}
   Write a command that will remove 'Column_3' from the dataframe and save the new dataframe as newdf.
   1+2+2=5
7. Write different commands to import a 'comma-separated','tab-separated', 'semicolon-separated' and 'space-separated' files named 'sample.csv' with Pandas. Save these files as cdf,tdf,sdf and scdf. Now save the cdffileas a new file named 'newSample.csv' without index.
   5
8. (a) A dataframe named 'df'contains 25 rows and 3 columns. What will be the output from df.shape command?
   (b) A dataframe named 'df' looks like:

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

City	Population	Median Age
Maplewood	100000	40
Wayne	350000	33
Forrest Hills	300000	35
Paramus	400000	55
Hackensack	290000	39

Write a command to check its column names. Write a column to sort the values under 'Population' column in ascending order. Write another column to sort the values under 'Median Age' in descending order. Insert a column named 'New_column' with all values a 0. 1+4

9. Suppose you have a Pandas dataframe named 'df' that looks like the following:

	Column_1	Column_2	Column_3
0	1	4	7
1	2	5	8
2	3	6	9

Write the following outputs.

(a) df.loc[0:1]
(b) df.iloc[:,:]
(c) df.iloc[:,1:2]
(d) df.iloc[1:2,:]
(e) df.iloc[0,0] 5

10. How will you import Multilayer Perceptron (MLP) classification analyses module from Sckikit-learn. Suppose you have a dataframe named df. Write the command to divide this to a training set (80%) and a test set (20%) with Scikit-learn keeping random seed value of 42. Given that the response variable is Y and dependent variables as X, which command(s) will you will you fit these with MLP classification model (using default values). 1+2+2=5

(B) Answer any one question

1. What is Perceptron. Diagrammatically represent a Perceptron. What do you mean by Inputs, Weights and Output. 2+2+6=10
2. Write short note on various types of machine learning techniques. 10

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

College of Pharmacy
Durgapur

Dr.B.C.Roy College of Pharmacy & AHS, Durgapur

Add-on Course : Python and AI/ML 2023 - 24

Merit List Rank	NAME	ROLL NO	Theory(60)	Practical(40)	Total
ML01	Suvajit Bhunia	18901922102	41	36	77
ML02	Santanu Das	18901922104	30	30	60
ML03	Chayanika Kundu	18901922092	40	36	76
ML04	Kushal Saha	18901922088	44	38	82
ML06	Suman Jana	18901922081	31	32	63
ML07	Samadrita Ghosh	18901922015	18	25	43
ML08	Samprati Maity	18901922066	18	28	46
ML09	Surajeet Ghosh	18901922060	44	38	82
ML10	Subham Dey	18901922033	A	A	A
ML11	Abhijit Khutia	18901922037	A	A	A
ML12	Munshi Aman Sahein	18901922036	26	28	54
ML13	Rintu Pal	18901922082	40	34	74
ML14	Ayan Mondal	18901922087	36	31	67
ML15	Tutun Mandal	18901922003	22	22	44
ML17	Ankit Das	18901922090	35	30	65
ML18	Soumyadip Pal	18901922093	42	37	79
ML19	Debjit Chakrabarti	18901922075	A	A	A
ML20	Spandan Ghosh	18901922034	A	A	A
ML21	Saumyadip Kayal	18901922086	31	32	63
ML22	Ritrisha Adhikary	18901922021	16	27	43
ML23	Manoj Kumar	18901922002	15	25	40
ML24	Arpita Roy	18901922085	32	32	64
ML25	Souvick Maity	18901922100	17	25	42
ML26	Oindrila Nag	18901922007	46	38	84
ML27	Rakhi Dhua	18901922018	6	25	31
ML28	Bishal Das	18901922084	20	28	48
ML29	Shreyasi Maiti	18901922103	18	28	46
ML30	Akash Routh	18901922010	25	30	55
ML31	Nayan Dutta	18901922044	A	A	A
ML32	Agnik Khutia	18901922058	A	A	A
ML33	Prithwish Ghosh	18901922054	A	A	A
ML34	Soumen Khanra	18901922017	27	30	57
ML35	Saikat Biswas	18901922079	A	A	A
ML36	Abhijit Ghosh	18901922035	23	28	51
ML37	Tanmoy Datta	18901922038	42	36	78
ML38	Shreya Rout	18901922094	19	27	46
ML39	Subhadip Banerjee	18901922019	34	35	69
ML40	Soumyadip Mahato	18901922074	29	33	62
ML41	Sayan Bhattacharyay	18901922020	29	30	59
ML42	Debleena Ghosh	18901922091	27	30	57

College of Pharma

Prof. (Dr.) Sankar Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

05/4/2024

DR. B. C. ROY COLLEGE OF PHARMACY AND ALLIED HEALTH SCIENCES

M. Pharm / B. Pharm. / D. Pharm. 2nd Year 3rd Semester / Part, 2024

CA / IA No. _____ Date 29/01/24

Name Tanmoy Datta Exam. Cell Sl. No. 18901922038

Paper _____ Paper Code _____

Sl. No. IE/T/ 10027

29/01/24
Signature of Invigilator

FOR EVALUATION ONLY

(Marks Obtained) [Full Marks .....]

Question Number												Total Marks	Evaluator's Signature
Marks Obtained												42/60	05/11/24

[START ANSWERING FROM THE SPACE BELOW]

A.

1. Python supports d) all of the mentioned. ~~a) object-oriented programming.~~

2. b) yes python is case sensetive when dealing with identifiers.

3. c) ~~d)~~ Python code is only ~~interpreted~~ compiled.

4. a) 7

5. a) Indentation is used to define a block of code in Python language.

6. b) # is used to give single-line comments in python.

C. Roy College of Pharmacy Durgapur

(Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

7. a) 512, 64, 512

8. a) 31 13

9. b) x y z p = 5000 6000 7000 8000

10. c) point

11. a) abc

12. b) //

13. b) 1020

14. a) 0 times

15. b) .py

B.

1. Difference between:-

a) = and == -

'=' is a assignment operator. It is used to assign a value to a specific variable.

'==' is a relational operator. It is used for checking the two values of their variables are same or not.

b) "and" and "or" -

"and" gives true when both condition are true or false.

"or" gives true when any one condition is true.

c) / and // —

'/' used in float division.

'//' used in integer division.

d) * and ** —

'*' is used for multiplication of two numbers.

'**' is used ~~for~~ to define power of a number.

e.g. - 2**3 means 2^3.

2.

```
a=25
while a<=500:
    print(a)
    a+=25
```

3. Significance of "else":-

If a statement doesn't fulfill the condition the 'else' will execute.

Example:-

max. value between TWO numbers:-

```
a=10
b=20
if a>b:
    print("max is", a)
else:
    print("max is", b)
```

Output:- max is 20.

4. Any number of return statement can be used in a function but any one will be executed at a time.

Example:-

```
def grade(m):
    if m>=50:
```

```
def cal(a, b):
    if a>b:
        return(a+b)
    else:
        return(a*b)
a=int(input("Enter a no."))
b=int(input("Enter a no."))
print(cal(a,b)).
```

5. Actual and formal arguments:-

Actual arguments is those arguments that are used at the time of function call.

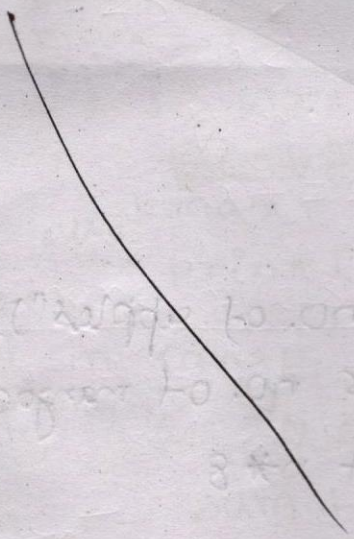
Formal arguments is those arguments that are used in function definition.

Example:-

```
def addition(x,y):
    return(x+y)
a=int(input("Enter a no"))
b=int(input("Enter a no"))
x=addition(a,b)
print("sum is", x)
```

x, y is formal arguments.
a, b is actual arguments.

6.



7. d) none of the mentioned.

8. Ans:- output → 15
5

9.

```
str = input("Enter a string")
print(str[0])
print(str[-1])
```

9.

```
str = input("Enter a string")
print("First character is", str[0])
print("Last character is", str[-1])
```

10. output →

```
0
1
2
3
4
5
Finally finished.
```

C.

1.

```
m = int(input("Enter no. of apples"))
n = int(input("Enter no. of mangoes"))
purchase_amount = m*10 + n*8
if purchase_amount > 5000:
    NA = purchase_amount -
         (purchase_amount*0.02)
    print("Purchase amount is",
          purchase_amount,
          "Discount is 0.02",
          "net payable amount is",
          NA)
```

```
else:
    print("Purchase amount is", purchase_amount,
          "discount is 0", "net payable amount is",
          purchase_amount)
```

2.

```
L = [ ]
for i in range (10):
    x = int (input("Enter a no."))
    L.append (x)
for j in L:
    max = j
    if j > max:
        j = max
    else:
        print ("max is", max)
```

3.

```
sum = 0
for i in range [1, 100):
    if i % 3 == 0 and i % 7 == 0:
        sum += i
print("sum is", sum)
```

Dr. B. C. Roy College of Pharmacy & AHS * Durgapur

6/12/24
Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph. D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Evaluated answer script has been explained to me and it was found to be satisfactory / unsatisfactory.

Tanmoy Datta

Signature of Student

DR. B. C. ROY COLLEGE OF PHARMACY AND ALLIED HEALTH SCIENCES

M. Pharm / B. Pharm. / D. Pharm. _____ Year _____ Semester / Part, 20 23-24

CA / IA No. _____ Date 29/01/24

Name Kinku Pal Exam. Cell Sl. No. 18901922082

Paper PYTHON (THEORY) Paper Code _____

Sl. No. IE/T/ 10028

29/01/24
Signature of Invigilator

FOR EVALUATION ONLY

(Marks Obtained) [Full Marks .....]

Question Number													Total Marks	Evaluator's Signature
Marks Obtained													40/60	05/01/24

[START ANSWERING FROM THE SPACE BELOW]

A) 1. Python supports (d) ~~all of the mentioned object oriented programming~~.

2. (b) Yes Python is case sensitive when dealing with identifiers.

3. (c). Python code is only compiled.

4. 4+3%5 ⇒ 7 — (a)

5. To define a block code in Python Language ~~(d) all of the mentioned.~~ (a) Indentation used

6. (b) # is used to give a single line comment.

7. (a) 512, 64, 512

8. (a) 31 13.

9. ~~(a) (b) (c)~~ (b) x y z P = 5000 6000 7000 8000

C. Roy College of Pharmacy Durgapur

16/1/24
Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

10| (c) point

11. (b) ABC.

12| (b) 11

13| (b) 1020

14| (a) 0 times.

15| (b) .py

B| (1) Difference between

(a) = and ==

= ⇒ is used the assign a value to the specific variable

== ⇒ is used to check the value which is equal or not.

(b) "and" and "or"

'and' ⇒ gives true when both the conditions are true.

'or' ⇒ gives true if one of the conditions is true.

(c) / and //

/ ⇒ is used to divide two variable. it may be integer or float

// ⇒ used to make an integer division.

(d) * and **

* ⇒ is used to multiply two variable. a*b = a×b.

** ⇒ is used to define the power of variables

a**b ⇒ a^b.

(2)
```
a=25
while a<=500:
    print(a)
    a=a+25
```

(3) Significance of "else"

⇒ If a statement doesn't fulfill the condition then it will work and the print the string in the condition under else.

Ex! input any two no. and display the max.

```
a=int(input("Enter a no"))
b=int(input("Enter a no"))
if a>b:
    print("max=", a)
else:
    print("max=", b).
```

(4) Any number of return statement can be used in function but it will ~~exceed~~ execute one time.

Example!

```
def square(x,y,z).
    return(x*x, y*y, z*z)
x=int(input("Enter a no"))
y=int(input("Enter a no"))
z=int(input("Enter a no"))
a,b,c = square(x,y,z).
print(a,b,c)
```

Example:

```
def max(a,b):
    if a>b:
        return a
    else:
        return b.
a = int(input("Enter a no"))
b = int(input("Enter a no"))
Res = max(a,b)
Print("max=", Res)
```

2

(5) Actual Argument:

The arguements which is used during function call is called Actual Argument.

Formal Arguments:

The arguements which is used during function definition is called Formal arguments.

2

Example:

```
def. addition(x,y)
    return(x+y)
a = int(input("Enter a no"))
b = int(input("Enter a no"))
Res = addition(a,b)
Print(Res).
```

* here a & b is the Actual arguments and x,y is the formal arguments.

(7) (c) error.

(8) (1) 15 (2) 5

3

(9)
```
inp string = input ("Enter a string").
Print (string[0])
Print (string[1])
```

3

(10) Output:

```
0
1
2
3
4
5
finally finished!
```

3

(e)
```
m = int(input("Enter a no"))
n = int(input("Enter a no"))
T = 10*m + 8*n
if T > 5000:
    NP = T*0.98
else: NP = T
Print("Purchase amount=", T)
Print("Discount=", T-NP)
Print("Net payable amount=", NP)
```

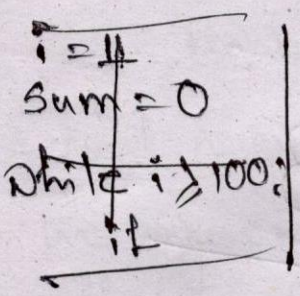
2½

2|

```
L=[]
for i in range(10):
    n=int(input("Enter a no"))
    L.append(n)
for i in L:
    max=L[0]
    if i>max:
        max=i
print(max).
```

2

3|




```
sum=0
for i in rang(1,100)
    if i%3==0 and i%7==0:
        sum=sum+i
print("Sum is=", sum)
```

3½

Prof. (Dr.) Sahir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

DR. B. C. ROY COLLEGE OF PHARMACY AND ALLIED HEALTH SCIENCES

M. Pharm / B. Pharm. / D. Pharm. 2nd Year _____ Semester / Part, 2024

CA / IA No. _____ Date 29/1/24

Name Soumyadip Pal Exam. Cell Sl. No. 1890192209

Paper _____ Paper Code _____

Sl. No. IE/P/ 12133

29/01/24

Signature of Invigilator

FOR EVALUATION ONLY

(Marks Obtained) [Full Marks .....]

Question Number												Total Marks	Evaluator's Signature
												37	29/01/24

[START ANSWERING FROM THE SPACE BELOW]

8) Input a string and check wheather if is palindrome or not.

```
str = input("enter a string ===>>> ")
n = str[::-1]
if n == str:
    print("palindrome")
else:
    print("not palindrome")
```

output

1) enter a str ===>>> madam
↳ palindrome

2) enter a str ===>>> a
↳ not palindrome

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

C. Roy College of Pharm

Dr. B. C. Roy College of Pharmacy & AHS, Durgapur

Course Name : Basic Programming with Python and its application in database management, artificial intelligence and machine learning(AI/ML).

Exam Date : 29/01/2024

F.M : 40 **Practical** **Time : 1.00 Hrs**

Q. Write a python program to input a string and a string and check whether it is palindrome or not.
A string is palindrome if it is same from both the sides.
Eg. Input➔ madam Output➔ palindrome
Input➔ abcdbax Output➔ Not palindrome.

Dr. B. C. Roy College of Pharmacy & AHS Durgapur

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

DR. B. C. ROY COLLEGE OF PHARMACY AND ALLIED HEALTH SCIENCES

M. Pharm / B. Pharm. / D. Pharm. 2nd Year 3rd Semester / Part, 20 24

CA / IA No. _____ Date 29/1/24

Name Subhadip Banerjee Exam. Cell Sl. No. 18901922019

Paper Python Paper Code _____

Sl. No. IE/P/ 12109

29/01/24
Signature of Invigilator

FOR EVALUATION ONLY
(Marks Obtained)

[Full Marks .....]

Question Number												Total Marks	Evaluator's Signature
												35	29/01/24

[START ANSWERING FROM THE SPACE BELOW]

INPUT

```
i° = [ ]
for x in range(10):
    a = int(input("enter a no"))
    i°.append(a)
    print(i°)
b = int(input("enter a no"))
if b in i°:
    print("present", i°.index(a))
else:
    print("not present")
```

Output

L = [33, 44, 55, 66, 76, 12, 34, 56, 59, 11]
Inputted number is : 44 Output → Present
present 9 → 2

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy Durgapur

Inputted number is : 66 — Output → Present present at 4

Inputted number is : 19 — Output → Not present

Inputted number is : 11 — Output → Present, present → 10

16/12/24

Prof. (Dr.) Samir Kumar Samanta
M. Pharm., Ph.D. (J.U.)
Principal
Dr. B. C. Roy College of Pharmacy & AHS
Durgapur, West Bengal-713206

Dr. B. C. Roy College of Pharmacy & AHS * Durgapur

Dr. B. C. Roy College of Pharmacy & AHS, Durgapur

Course Name : Basic Programming with Python and its application in database management, artificial intelligence and machine learning(AI/ML).

Exam Date : 29/01/2024

F.M : 40 **Practical** **Time : 1.00 Hrs**

Q. Write a python program to implement linear search algorithm, i.e, input any 10 numbers in a list and input a number. find whether the inputted number is present in the list or not. If present the display the position.

Eg. L=[10,7,8,90,56,34,66,71,43,12]

Inputted number is : 71 Output→ element found at position: 8

Inputted number is : 33 Output→ element not found