

EDUCATALYSTS

PYTHON Sample paper

SESSION ENDING EXAM SAMPLE PAPER-I
CLASS XI
SUBJECT COMPUTER SCIENCE

TIME : 3 Hours

Max Marks: 70

Programming Language: Python

- Q1(a) What is the syntax to print output in a single line. 1
- (b) Define NoSQL Database. 1
- (c) Differentiate between list and tuple constructs of Python 1
- (d) Draw XOR gate using minimum number of NAND gate. 2
- (e) What is a function call IN PYTHON? Give Example 2
- (f) Write the Python code to create the dictionary to include the list of following countries and their capital. 2

India	New Delhi
Pakistan	Islamabad
Srilanka	Colombo
Bangladesh	Dhaka

- Q2(a) Write a program in python to find out greater of two numbers. 2
- (b) Given the following code , write down what would be printed as output- 1

A=3

While(l in a):

Print ""Happy""**i

- (c) Write pseudo-code / flowchart to input the year and to test and display whether the given year is leap year or not? 3
- (d) Write python program to calculate area of circle. The radius being the input. 2
- (e) Given the following python code what values are printed as output? 2

def afunc(B):

```

B=B%2
Print B
A=2
afunc(A)
afunc(A+5)
Print A

```

- Q3: a) Is python a compiled or an interpreted language? 1
- b) Differentiate between compiler and interpreter. 1
- c) Write a short note on string constructs in python. 2
- d) What are the benefits of using cloud computing (any two)? 2
- e) List some common datatypes used in python. 1

Q 4: Answer the following questions-

- (a) What is the function performed by len() and reverse() in the list module. 2
- (b) Find error in the given SQL code: (Consider the table: ADM) 1

```
insert into values {"admin","write"};
```

Q5: Answer the following Questions:

- (a) Convert: 2
- A) $(1234.56)_{10} = (?)_{16}$
- B) $(476)_8 = (?)_2$
- b) i) What is the role of load balancing in parallel computing? [2X1=2]
- ii) Arrange the following in ascending order of memory capacity:
- TB , Byte, KB, Nibble, PB, MB, GB 1
- (c) Define primary key. 1

Q6: Answer the following Questions:

- a) What are the rules for using social networking sites 2
- b) What is Cracking? Suggest the ways to protect the computer from cyber attack. 2
- c) Define eavesdropping and phishing . 2
- d) What is cyber bullying. How it is done. 2

e) What are the tips to safely browse the internet.

2

Q.7 Answer the question based on the table given below:

TABLE : Student

Column Name	Data Type	Size	Constraint
Roll_No	NUMBER	4	PRIMARY KEY
Name	VARCHAR	20	Not Null
Stipend	NUMBER	7	Stipend is greater than 0
Stream	VARCHAR	15	Not Null
Grade	VARCHAR	1	

(i) Write the SQL command to create the above table with constraints.

1

(ii) Insert 2 records with relevant information, in the table student

1

(iii) Display all the records of the table Student.

1

(iv) Delete the Student Whose Roll no is 100.

1

(v) Change the Stream of Student to 'Computer' Whose Roll no. is 536.

1

(vi) Add one column email of data type VARCHAR and size 30 to the table student.

1

Q8: Answer the question based on the table given below:

TABLE : HOSPITAL

No.	Name	Age	Department	DatoFadm	Charges	Sex
1	Arpit	62	Surgery	21/01/98	300	M
2	Zareena	22	ENT	12/12/97	250	F
3	Kareem	32	Orthopedic	19/02/98	200	M
4	Arun	12	Surgery	11/01/98	300	M
5	Zubin	30	ENT	12/01/98	250	M
6	Ketaki	16	ENT	24/02/98	250	F
7	Ankita	29	Cardiology	20/02/98	800	F
8	Zareen	45	Gynecology	22/02/98	300	F
9	Kush	19	Cardiology	13/01/98	800	M
10	Shilpa	23	Nuclear Medicine	21/02/98	400	F

(a) To list the names all the patients admitted after 15/01/98. 1

(b) To list the names of female patients who are in ENT department. 1

(c) To list names of all patients with their date of admission in ascending order. 1

(d) To display Patient's Name, Charges, Age for only female patients. 1

(e) Find Out the Output of Following SQL Command:-

(i) Select COUNT(DISTINCT charges) from HOSPITAL; 1

(ii) (ii) Select MIN(Age) from HOSPITAL where Sex="F"; 1

Q9 (a) What is the difference between math.abs() and math.fabs()?

Give Example. 2

(b) What is String? How do you create a string in Python? 2

(c) Write a program to check whether entered string is palindrome or not. 3

(d) Refer the following code and predict the output [4x1/2=2]

```
a=[1,2,3]
```

```
b=[4,5,6]
```

```
c=a*b  
d=c[0:3]  
e=d  
a[5]=10  
c[1]=20  
e[0]=30
```

(i) Print e (ii) print a (iii) print d (iv) print c

e) Write a python program to receive the numbers from user through keyboard until user gives 0 (to end the input process), then the program calculate and display the sum of given odd numbers and even numbers respectively.

[4]

e.g.

if the user gives the following sequence of numbers:

7 5 10 14 3 9 11 12

Then the output should be as follows:

The Sum of even numbers in given input sequence = 36

The Sum of odd numbers in given input sequence = 35

XI- Computer Science (083)

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S. No	Typology of Questions	Very Short Answer (VSA) (1 mark)	Short Answer-I (SA-I) (2 marks)	Short Answer -II (SA-II) (3 marks)	Long Answer (L.A.) (4 marks)	Long Answer (L.A.) (6 marks)	Total Marks
1	Programing in Python (Unit1)	5	10	2	1	-	35
2	CSO (Unit2)	2	4	--	—	--	10
3	Data Management (DM-1, Unit 3)	3	--	--	-	2	15
4	Society, Law and Ethics (SLE-1)- Cyber Safety (Unit 4)	—	5	-	-	-	10
	Total Marks	10	38	6	4	12	70

