

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()? 2
- 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)

Session: 2018-19

**BLUE PRINT**

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

