

SESSION ENDING EXAM PAPER(SAMPLE)

CLASS XI

SUBJECT COMPUTER SCIENCE

TIME : 3 Hours

Max Marks: 70

Programming Language: Python

- Q 1 a) Name 2 application software. 1
 b) Name any 2 devices that run on mobile OS. 1
 c) Name 2 public cloud services. 1
 d) Convert the Following as Directed 2
 (i) $(23.25)_{10} = ()_2$ (ii) $(C4)_{16} = ()_8$
 e) Express -15 in 1's complement as well as 2's complement form. 1
 f) Name the law and verify it using a truth table. 2
 $A+BC=(A+B)(A+C)$
 g) Draw the logic circuit from the following expression 1
 $AB+A'C$
 h) Minimize the following :: 1
 $A+\{A.(B.C)\}$
- Q 2) a) which function of python tells the data type of an object. 1
 b) Write a python statement to assign the values "apple", "50" to fruit, rupees 1
 c) Identify the type of Token: 2
 i) D_o_b ii) True
 iii) * iv) %
 d) What are the supported data types in python? 2
 e) What are the key features of Python? 2
 f) Find the output for the following:: 3
 i) `str="vijaya vishwa tiranga pyara"`
 `print("Line1",str[14], end='#')`
 `print("\t", str[4:7])`
 `print(str*3, str[16:], sep="***")`
 ii) `x=20`
 `x=x+5`
 `x=x-10`
 `print (x)`
 `x,y=x-1,50`
 `print (x,y)`

g) Write a program to enter the side of a square and print its area and perimeter. 2

h) Evaluate the following expression with precedence of operator: 1

$$X = 2 * 3 / 5 + 10 // 3 - 1$$

i) Write the following expressions in Python: 3

a. $(7x - 4)^3 - 4$

b. $\left(\frac{\sin(y) - \cos(y)}{1 + y^2}\right)^3 - 4$

c. $(x^5 - \sqrt{7 - x})^3 - 4$

Q 3) a) Find syntax error(s), if any, in the following code:: 2

```
MAX='4'
a=int(input"Enter the value of a:")
b= int(input"Enter the value of b:")
    if(a>b)
        MAX=5
for x in range(0, MY_MESSAGE):
    print("%d" %(x))
```

b) Write an appropriate for loop to be repeated 100 times, except the loop is to be terminated if the value of the variable P becomes 50. 2

c) What will be the value of a after executing the following codes? 2

| | |
|--|---|
| i) a=0 for i in range(10): a=a+1 for j in range(10): a=a+1 print(a) | ii) a=0 for i in range(10): a=a+1 for j in range(10): a=a+1 print(a) |
|--|---|

d) Name the error and error message: 2

- i) answer="Hello"+1
- ii) while True print("Hello World")

Q4) a) WAP in python to delete all duplicate elements in a list. 4

For eg:

If Alist is: [5,2,4,-5,12,2,7,4]

After deleting duplicate elements, new list should be: [5,2,4,-5,12,7]

b) Differentiate between list and tuple constructs of Python 2

c) Write the Python code to create the dictionary to include the list of following item

a=10

b=20

2

(d) Refer the following code and predict the output

```
a=[1,2,3]
b=[4,5,6]
c=a+b
d=c[0:3]
e=d
c[5]=10
c[1]=20
e[0]=30
print(a)
print(c)
print(d)
print(e)
```

Q 5: Answer the following questions-

- a) Define NoSQL Database. 1
- b) What does a MongoDB database refer to table and records? 1
- c) Find error in the given SQL code: (Consider the table: Language) 1
insert into values {"CS","Python"};
- d) Define primary key. 1

.6 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

Q7: 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:- 1

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

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

Q8: 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 .

- d) What is cyber stalking? How it is done. 2
- e) What are the tips to safely browse the internet. 2

XI- Computer Science (083)

Session: 2018-19

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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) | 3 | 11 | 2 | 1 | - | 35 |
| 2 | CSO (Unit2) | 6 | 2 | -- | - | -- | 10 |
| 3 | Data Management (DM-1, Unit 3) | 5 | -- | -- | 1 | 1 | 15 |
| 4 | Society, Law and Ethics (SLE-1)- Cyber Safety (Unit 4) | - | 5 | - | - | - | 10 |
| | Total Marks | 10 | 38 | 6 | 4 | 12 | 70 |