

18/3/

①

KENDRIYA VIDYALAYA SANGATHAN



एवम एव पुनः अयाचतु
केन्द्रीय विद्यालय संगठन

RANCHI REGION

SESSION ENDING EXAMINATION 2018 - 19

CLASS - XI

MARKS : 70

SUBJECT : COMPUTER SCIENCE

TIME : 3 HOURS

General Instructions:-

1. Answer all the questions.
2. Programming language used Python and MySQL.

-
- 1 (a) Evaluate the following expression with precedence of operator: 1
$$x = 2 * 3 / 5 + 10 // 3 - 1$$
 - (b) Is python object oriented language? 1
 - (c) How are tuples different from lists when both are sequences. 1
 - (d) What is nested list? Explain with example. 2
 - (e) Write most appropriate list method to perform following task 2
 - i) Delete a given element from a list
 - ii) Add element in beginning of List
 - (f) Write the Python code to create the dictionary to include the list of following countries and their capital. 2

Bihar	Patna
Jharkhand	Ranchi
Assam	Dishpur
Odisha	Bhubneshwar

2 (a) Write a program in python to input length and breadth of rectangle and calculate its area. 2

(b) Find the output of the given code in Python 2

```
a = 9.0//4.0
```

```
b = 'HI' * 3
```

```
print('Values are',a,b)
```

(c) Write a Python program to find the largest of three numbers. 3

(d) Write python program to print Fibonacci series first 20 elements. Some initial elements of a Fibonacci series are-

0 1 1 2 3 5 8 3

(e) Write the output of the following code: 2

```
If a = [4,3,2,5,6]
```

S = "WELCOME" then write the output of the following:

(i) print(a[:-3:-1])

(ii) print(a[-3:4])

(iii) print(S[::-1])

3 (a) How are comments written in a Python program? 1

- (b) Differentiate between compiler and interpreter. 1
- (c) What is string slice? How it is use full? 2
- (d) What are immutable and mutable types? List immutable and mutable types of python? 2
- (e) Which data types of Python handle Numbers? 1
- 4 (a) Write the difference between append() and extend() methods in the list module. 2
- (b) Python provides a Debugger, name it? 1
- (c) Write a python program to sort a list using Bubble sort. 3
- (d) T1=(100,) T2=(100) Differentiate T1 and T2 1
- 5 (a) Convert: 2
- A) $(B2F)_{16} = (?)_8$
- B) $(3674)_8 = (?)_2$
- (b) i) What is SoC? How it is different from CPU? 2
- ii) Arrange following memory unit in ascending order of their size 1
- TB, Byte, KB, Nibble, PB, MB, GB
- (c) State and verify Absorption law in Boolean algebra. 2
- (d) What is cloud computing? 1
- (e) Draw the logic circuit for the Boolean expression $X'Y+XZ$ 2
- 6: (a) What are the rules for using social networking sites? 2

- (b) What is Cyber safety? Suggest the ways to protect the computer from cyber - attack. 2
- (c) Define eavesdropping and phishing. 2
- (d) What is cyber bullying and cyber Stalking ? 2
- (e) Give any two tips for safely browsing the web. 2
- 7 (a) What are views ? How are they useful? 2
- (b) Answer the question based on the table given below: 6

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 primary key constraints.
- (ii) Insert 2 records with relevant information, in the table student
- (iii) Display all the records of the table Student.
- (iv) Delete the Student Whose Roll no is 100.
- (v) Change the Stream of Student to 'Computer' Whose Roll no. is

536.

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

8 (a) What are Natural Join? 1

(b) Answer the question based on the table given below: 6

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.

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

- (c) To list names of all patients with their date of admission in ascending order.
- (d) To display Patient's Name, Charges, Age for only female patients.
- (e) Find Out the Output of Following SQL Command:-
 - (i) Select COUNT(DISTINCT charges) from HOSPITAL;
 - (ii) Select MIN(Age) from HOSPITAL where Sex="F";