

# Mock Paper

## Informatics Practices- XI

### Q1 Answer all the questions

- a) List the names of two components of the CPU 1
- b) What are the two parts of main memory? 1
- c) Why are the secondary storage devices required? 1
- d) Define Hardware and Software. 1
- e) What is an operating system? 1
- f) What is an IP address? 1
- g) What is social networking? 1
- h) Write down names of any three social networking sites. 1
- i) What is cyber trolling? 1
- j) What is cyber stalking? 1

### Q2 Answer all the questions

- a) Who developed Python? 1
- b) State some features of Python. 1
- c) What is the difference between interactive mode and script mode in Python? 1
- d) Which of the following are invalid strings in python? 1  
'Python' b) "Python" c) "Python" d) 'Python'
- e) What is the difference between a keyword and a variable? 1
- f) How many types of comments are supported in Python? 1
- g) What are variable naming conventions? 1
- h) Identify the types of the following literals: 1  
3.738, 237, True, 'True', "True", False, None
- i) How can you create multiline strings in Python? 1
- j) What are jump statements? 1

### Q3 Answer all the questions

- a) What do you understand by Degree and Cardinality of a Table? 1
- b) What do you understand by candidate key and primary key? 1
- c) What do you mean by data redundancy? 1
- d) What are DDL and DML statements? Give example 2
- e) What is NULL value? 1
- f) What is the purpose of order by clause? 1
- g) What do you mean by ALTER and UPDATE command? 2
- h) What is the purpose of DISTICT clause? 1

**Q4 Find output generated by the following code:**

**3**

i) `x=2`  
`y=3`  
`x+=y`  
`print(x,y)`

ii) `a=5`  
`b=10`  
`a+=a+b`  
`b*=a+b`  
`print(a,b)`

iii) `p=5/2`  
`q=p*4`  
`r=p + q`  
`p+=p + q + r`  
`r+=p + q + r`  
`q= p +q*r`  
`print (p, q, r)`

iv) The following code is not giving the desired output. We want to input value as 15 and obtain output as 30. Could you pinpoint the problem? **1**

```
num= input("Enter Number:")  
result = num*2  
print(result)
```

v) What will be the output produced by the following code? **2**

```
x, y =2, 6  
x, y = y, x + 2  
print (x, y)
```

vi) Write a program to compute area of circle. **2**

vii) Write a program that accepts marks in 5 subjects and outputs the average marks. **2**

**Q5 a) Convert the following while loop into for loop:**

**2**

```
x = 5  
While (x<10);  
Print (x+10)  
x+=2
```

**b) Convert the following loop into while loop:**

**2**

```
for k in range (10, 20, 5) :  
print(k)
```

**c) Find error in the following code (if any) and correct the code by rewriting it and underline the corrections :** **2**

```
x = int ('Enter value for x:')
for in range [ 0,11] :
if x=y
print x+y
else :
print x-y
```

**d) Find the error in the code (if any) and correct it** **2**

```
code = input(' Enter season code :')
if code=w :
print 'winter season'
elif code == r:
PRINT 'rainy season'
else :
```

**e) Write the output of the following programme on execution if x=50** **2**

```
if x >10:
if x > 25:
print ('ok')
if x > 60:
print ('good')
elif x>40 :
print ('avarage')
else :
print (' no output')
```

## **Q 6.**

a) Write down SQL statement for creating table LIBRARY having following attributes: **2**

- i. BOOK\_ID – an integer, primary key of the table
- ii. BOOK\_TITLE –a string
- iii. AUTHOR—a string
- iv. QTY – an integer v.
- v. PRICE – a real number

b) A table FLIGHT has 4 rows and 3 columns and another table AIRHOSTESS has 3 rows and 4 columns. What will be the degree and cardinality of the resultant table if we obtain Cartesian product of these two tables? **2**

c) What is the significance of '%' and '\_' in a query statement? **2**

(d) Mr. Rath, a database administrator in “Aakash Sports Institute” Has created the **4**  
following table named “GYM” for the upcoming training schedule:

**Table: GYM**

ICODE	INAME	PRICE	BRANDNAME
G101	Power Fit Exerciser	20000	Power Gynea
G102	Aquafit Hand Grip	18000	Reliable
G103	Cycle Bike	Null	Ecobike
G104	Protoner Extrem Gym	30000	Coscore
G105	Message Belt	5000	Message Expert
G106	Crosstrainer	13000	GTC Fitness

Help him in writing SQL query/command for the following purpose:

- i. To add a column duration with suitable data type.
  - ii. To display list of free Gym.
  - iii. To change the brandname to “Fit Trend India” of the item whose icode as “G104”.
  - iv. To count and display the different BrandName
- (b) Consider the table SPORTS given below. Write commands in MySQL for (i) to (v) and output for (vi) & (vii).

10

**SPORTS**

SrNo	SName	Class	Game	Grade	Fees
1	Rahul	12	Cricket	A	53000
2	Sugandha	10	Football	B	88000
3	Saumil	11	Cricket	NULL	44000
4	Pradip	10	Football	B	23000
5	Amit	11	Carrom	A	75000
6	Vivek	12	Tennis	C	11000

- i. To display the SName and Fees as annual Fees
- ii. To display different game
- iii. To display first 4 characters of SName.
- iv. To insert a dummy record
- v. To increase fees of Rs. 500 for the game Tennis
- vi. To display the SNAME, GAME and FEES of all players whose fees is greater than
- vii. 45000 and less than 70000(both values inclusive).
- viii. Display the sum, Minimum and Average of Fees.
- ix. Select concat(SName,substr(Game,2,2)) from Sports.
- x. Select SName, Class, GAME from SPORTS where SName not like „B%“.

