

RYAN INTERNATIONAL SCHOOL  
I Term ( SET – A)

Subject : *Computer Science (New)*

Class : *XI*

Time allowed : *3 hours*

Maximum Marks : *70*

**Note :**

- Please check that this question paper contains 7 questions.
- Answer the questions after **carefully reading** the text.
- All questions are compulsory.

**Q1. Question based on Fundamental of computer**

- |  |   |
|--|---|
| a) List the differences between Interpreted and Compiled language. | 1 |
| b) Expand the following : i) UTF32      ii)ISCII                   | 1 |
| c) Write name of five output devices.                              | 1 |
| d) Draw the truth table of OR Boolean logic.                       | 1 |
| e) Explain different models for deployment in cloud computing?     | 2 |
| f) Mention the name of some large cloud providers and databases.   | 2 |
| g) Differentiate between parallel computing and serial computing.  | 2 |

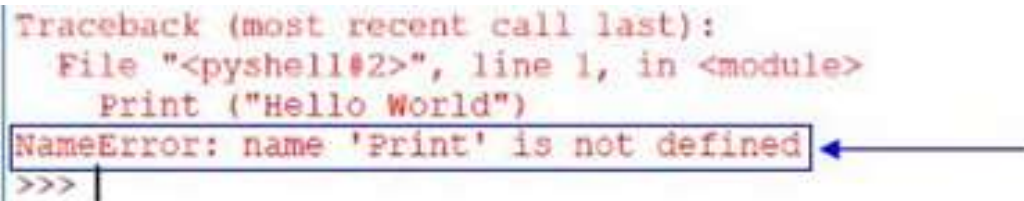
**Q2 Questions given below are based on Basics of Python programming.**

- |   |   |
|---|---|
| a) Is Python an Object Oriented language?                                   | 1 |
| b) 'Python is an interpreted high level language'.What does it mean to you? | 2 |
| c) Write the disadvantages of Python language.                              | 2 |
| d) In how many different ways, can you work in Python?                      | 2 |
| e) Write the function key to run the program in Script mode.                | 1 |
| f) Write the full form of IDLE.   | 2 |

**Q3 Questions given below are based on Basics of Python programming.**

- a) Mr Dharam Singh has started learning Python. She type following command in interactive mode but Python shows an error. Rectify the problem 2

```
>>> Print(2+3*4)
```



- b) Which function is used to know the address of memory location to which a variable is referring? 2
- c) What are the rules in Python which have to be followed to form valid variable names? 2
- d) Why the following variable name invalid? Give reason. 2

i)Roll Number      ii)9years      iii)R.I.S      iv)No#      v)While

e) What are literals? How many types of literals are available in Python? 2

**Q4 Questions given below are based on Python programming.**

a) Correct the error, if any, in the following statement: 1

i.  $L*b*h=volume$

ii.  $L=a b+c d$

iii.  $A=p*r n/100$

iv.  $Area=22\%7 r r$

b) Write the statements for the each situation described below: 2

1. Assign a value “vasantkunj” to the variable Market.

2. Assign a value represented by variable K to the variable K1.

3. Decrease the value of the variable flag by 4.

4. Print the value of p,q and r in three different lines.

c) Evaluate the following expressions: 3

i.  $(2 + 3) * 5 // 4 + (4 + 6) / 2$

ii.  $12 + 3 * (4 - 6) / 2$

d) Mahmood has taken a loan of Rs 40000 from Ashraf at a rate of 8% per annum simple interest. After 6 years Mahmood wants to repay the loan in full and final including interest. Write Python code to calculate and display the interest and total amount to be paid by Mahmood to settle the account.

4

**Q5 Questions given below are based on Python programming.**

a) Write a menu driven script to calculate the volume of a cube, cuboid, or sphere depending upon user's choice. 5

Where Volume of Cube is =length x length x length

Volume of Cuboid is =length x height x width

Volume of sphere =  $(4/3) \times \pi \times r^3$  and you can use  $\pi = 3.14$

b) Find errors, and rewrite the corrected code again 3

```
x = int(input("Please enter an integer: "))
if x < 0:
x = 0
print('Negative changed to zero')
elif x == 0:
print('Zero')
elif x == 1:
print('Single')
else:
print('More')
```

c) Find output 2

```

a=2
b=3
c=4
if(c>b):
    a=b+c
    d=a+b+c
    b=c+a
    c=a+b
print ("New Value of a=", a)
print ("New Value of b=", b)
print ("New Value of c=", c)
print ("Value of d=", d)

```

**Q6 Questions given below are based on Python programming.**

a) Find output

2

```

fruits = ["apple", "banana", "cherry", "Mango", "Licchi"]
for x in fruits:
    if x == "banana":
        continue
    print(x)

```

b) Write Python Program to Find the Sum of Digits in a Number .

4

c) Write python script to print the following pattern

4

```

3
5   5
7   7   7
9   9   9   9

```

**Q7 Questions given below are based on SQL(Data Management).**

(a) Write MySQL command to create the Table 'LIBRARY' with given constraints.

3

Table : LIBRARY

COLUMN_NAME	DATATYPE(SIZE)	CONSTRAINT

BookId	Int(10)	Primary Key
BookName	Varchar(40)	Not Null
Type	Char(4)	
Author	Varchar(40)	
No_Copies	Int(6)	
Price	Decimal(8,2)	

(b) Consider the following table named ‘‘SOFTDRINK’’. Write commands of SQL for (i) to (iv) and output for (v) to (vii).

Table : SOFTDRINK

DRINKCODE	DNAME	PRICE	CALORIES
101	Lime and Lemon	20.00	120
102	Apple Drink	18.00	120
103	Nature Nectar	15.00	115
104	Green Mango	15.00	140
105	Aam Panna	20.00	135
106	Mango Juice Bahaar	12.00	150

(i) To display names and drink codes of those drinks that have

- more than 120 calories. 1
- (ii) To display drink codes, names and calories of all drinks, in descending order of calories. 1
- (iii) To display names and price of drinks that have price in the range 12 to 18 (both 12 and 18 included). 1
- (iv) Increase the price of all drinks in the given table by 10%. 1
- (v) `SELECT COUNT(DISTINCT(PRICE)) FROM SOFTDRINK;` 1
- (vi) `SELECT MAX (CALORIES) FROM SOFTDRINK;` 1
- (vii) `SELECT DNAME FROM SOFTDRINK WHERE DNAME LIKE “%Mango%”;` 1

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