ARMY PUBLIC SCHOOL, DHAULA KUAN

EXAMINATION: UT 1 **YEAR: 2020-2021**

CLASS : XI **SUBJECT: COMPUTER SCIENCE**

M.M : 35 **DURATION: 1.30 HR**

GENERAL INSTRUCTIONS:

1. All questions are compulsory. Programming language : Python
2. Write the correct serial number of the question before attempting it.

Q1. Suggest appropriate functions for the following tasks: [2]

(i) To check whether the string contains digits

Ans isdigits() or isnumeric()

(ii) To capitalize all the letters of the string

Ans upper()

(iii) To remove all white spaces from the beginning of a string.

Ans lstrip()

(iv) To check whether all letters of the string are in capital letters.

Ans isupper()

Q2. Identify the errors in the following: [2]

a) Given two lists :

L1=[“this”,”is”,”a”,”List”]

L2=[“this”,[“is”,”another”],”List”]

Which **one** of the following will cause an error and why

(i) L1.upper() ii) L1[3].upper() iii)L2[1][1].upper()

Ans (i) will cause error because position is not specified

b) str="Hello World"

```
str[5]='p'
print(str)
```

Ans string is immutable so can’t change value at a particular position

Q3. Give the elements of the following list which are present at the given index numbers:

languages=['Hindi', 'English', 'Bengali', 'Oriya', 'Telugu', 'Marathi', 'Malayalam']

a) languages [2] b) languages [2:5:2] [2]

c) languages [2:5] d) languages [::-2]

Ans (a) Bengali

(b) ['Bengali', 'Telugu']

(c) ['Bengali', 'Oriya', 'Telugu']

(d) ['Malayalam', 'Telugu', 'Bengali', 'Hindi']

Q4. Write the most appropriate List methods to perform the following tasks: [4]

(i) To remove first occurrence of an element in a list .

Ans remove()

(ii) To add an item at the end of the list.

Ans append()

(iii) To add multiple elements to a list.

Ans extend()

(iv) To remove an element from the list if it’s index number is known.

Ans remove() or del

Q5. Predict the output of the following Python code:

a) i = 1 [1]

```
while True:
    if i%7 == 0:
      break
    print(i)
    i += 1
```

Ans

1
2
3
4
5
6

b) x=”hello”+”to Python”+”world” [1]

```
for char in x:
        y=char
        print(y+”:”,end=” “)
```

Ans

h: e: l: l: o: t: o: : P: y: t: h: o: n: w: o: r: l: d:

c) y=str(123) [2]

```
x=”hello” * 3
print(x,y)
x=”hello”+”world”
y=len(x)
print(x,y)
```

Ans

hellohellohello 123
helloworld 10

d) for x in [1,2,3] : [1]

```
   for y in [4,5,6] :
       print(x,y)
```

Ans

1 4
1 5
1 6
2 4
2 5
2 6
3 4
3 5
3 6

Q6. Write a program to take two inputs from the user, one is a string(s1) and other is a character(ch1) .The program should create a new string (s2) after deleting all occurrences of the character from the string s1 and print the new string s2. [3]

Ans

```
s2=" "
s1=input("enter string")
ch1=input("search character from string")
for i in s1:
   if(i!=ch1):
      s2=s2+i
print(s2)
```

or

any other solution

Q7. Rewrite the following code after converting while loop to a for loop : [2]

```
X=0
while X<5:
    X=X+1
    print (X)
```

Ans

```
for x in range(0:5):
    print(x)
```

Q8. Write a one line code to convert any string into title case . [2]

**Hint:

If the statement is “india is great”

Then the statement will be:

“India Is Great”

Ans

```
s="india is great"
print(s.title())
```

Q9. Select the correct option: [3]

a) What is the output of the following string operations:

```
Str=”My Income Tax is 5000”
print(Str.isalnum())
```

i) True ii) False

Ans

(i) True

b) Choose the correct function to get the ASCII code of a character

i) chr(‘char’) ii) ord(‘char’) iii) ascii(‘char’)

Ans (ii) ord(‘char’)

c) What is the output of the following:

```
Listr=[5,10,15,25]
print(Listr[ : :-2])
```

Ans

[25, 10]

Q10. Differentiate between break and continue statements using examples. [2.5]

Ans

Break	Continue
It terminates the execution of remaining iteration of the loop.	It terminates only the current iteration of the loop.
It causes early termination of loop.	It causes early execution of the next iteration.
'break' stops the continuation of loop.	'continue' do not stops the continuation of loop, it only stops the current iteration.

for val in "string":
  if val == "i":
  break
  print(val)
print("The end")
	for val in "string":
	  if val == "i":
	  continue
	  print(val)
	print("The end")

or

any other solution

Q11.Write a program for the following (**Do any two**): [5]

a) Using while loop find the sum of digits of an integer number, input by the user.

Ans

```
n=int(input("enter any number"))
s=0
while(num):
    r=num%10
    s=s+r
    num=num//10
print("sum of digits",s)
```

or

any other solution

b) To check if a string is a palindrome or not. (A string is called palindrome if it reads same backwards as forward. For example, Kanak is a palindrome.)

Ans

```
S=input("enter any string")
q= S[::-1]
if(q==S):
    print("palindrome")
else:
    print("not palindrome")
```

or

any other solution

c) To input a list and print the largest number and second largest number from the list of numbers.

Ans

```
A=[]
n=int(input("enter how many elements you want to enter into the list"))
for i in range(n):
    a=int(input("enter the value of element"))
    A.append(a)
A.sort()
print(" highest element",A[-1])
print("second largest element",A[-2])
```

or

any other solution

Q12. Mark True/False: [2.5]

(i) While statements get executed at least once
(ii) The break statement allows us to come out of a loop
(iii) The continue and break statement have same effect
(iv) We can nest loops
(v) We cannot write a loop that can execute forever.

Ans:

(i) False
(ii) True
(iii) False
(iv) True
(v) False