

LIONS SCHOOL MIRZAPUR
HALF YEARLY EXAMINATIONS 2021-22
TERM -1

CLASS- XI
SUBJECT- IP (065)

TIME: 3 hrs.
M.M.: 70

NOTE - Attempt all the questions.

- Q1- (a) Name the software required to make a computer functional. Write down its two Primary services. 2
- (b) What is the need for cache memory? 2
- (c) Why should we not discard our old, broken or malfunctioning storage devices without taking care to delete data? 1
- (d) Name the input/output device to used to do the following-
- i) to enter audio-based command.
 - ii) to assist a visually impaired individual in entering data. 2
- (e) How many bytes are there in 5 Kilo Byte? 1
- (f) Draw the block diagram of computer system. 2
- Q2- (a) Python is an interpreted high-level language. What do you mean by this statement? 2
- (b) Differentiate between interactive mode and script mode in Python. 2
- (c) Name some popular Python IDEs. 1
- Q3- (a) How can you create blocks of code in Python? 2
- (b) Predict the output of the following code-
- ```
x,y = 20,50
y,x,y =x, y-10, x+10
print(x,y)
```
- 2
- (c) Define dynamic typing giving an example. 2
- (d) Differentiate between syntax error and logical error. 2
- (e) Which of the following identifiers are invalid and why?
- i) `_percentage`
  - ii) `False`
  - iii) `full#marks`
  - iv) `serial_no` 2
- Q4- (a) Differentiate between mutable and immutable datatypes giving their examples. 3
- (b) What will be the output of the following code-
- ```
print(len(str(33//4)))
print(len(str(33/4)))
print(len(str(32/4)))
```
- 3
- (c) Consider the following code segment-
- ```
a=input("Enter the value of a:")
b=input("Enter the value of b:")
print(a+b)
```

If the user runs the program and enters 23 for a and 17 for b, then what will be the Output of the above code? 2

(d) Write a program in Python to calculate and display compound interest using the Formula  $I=P(1+R/100)^T-P$  where I,P,R and T represent compound interest, principal, Rate of interest and time period respectively. 3

(e) Give the output of following code-

```
a,b,c = 2,3,5
```

```
a *= b + c
```

```
print(a)
```

2

(f) Write the output-

```
print(27%7 or 27/0)
```

2

Q5- (a) Define selection or decision construct in Python giving some examples. Also draw its flowchart. 3

(b) Write a program in Python to find those numbers between 10 and 100 (both included)

which are divisible by 7 as well as by 5.

3

(c) Write the output of following code-

```
a=0
```

```
for k in range (5,12):
```

```
 if k%3 == 0:
```

```
 a += k
```

```
print(a)
```

2

(d) What will be the output-

```
c=0
```

```
for x in range (20, 8, -3):
```

```
 c=c+1
```

```
 print(x)
```

```
print(" Loop executed ",c ," times)
```

2

Q6- (a) Differentiate between append() and extend() functions of a list.

2

(b) Write the output-

```
l1= [3, 5, 6, 2.5, True, 4]
```

```
print(sum(l1))
```

2

(c) Predict the output-

```
Sr=['Hari', 'G-65', [45, 34, 48, 41, 35], 'XI C']
```

```
print(len(Sr))
```

```
print(max(Sr[2]))
```

```
print(Sr[2][3])
```

3

(d) What will be the output-

```
a=[2,4,6,8]
```

```
b=a
```

```
c=list(a)
```

```
a[2]=7
```

```
print(a)
```

```
print(b)
```

```
print(c)
```

3

Q7- (a) Why can't Lists be used as keys of dictionaries?

1

(b) Consider the following dictionary Smarks and find the output of following statements-

```
Smarks={"Ram":45, "Shyama":38, "Mohan":40, "Anita":36}
print(Smarks.get("Shyama"))
print(Smarks.values())
del Smarks["Mohan"]
print(Smarks)
```

3

(c) Carefully go through the following code and predict its output-

```
Dct = {}
Dct[3] = 5
Dct['3'] = 6
Dct[3.0] = 7
print(Dct)
```

2

(d) Write the output-

```
d={'A':50,'B':45,'C':48}
G={}
for x in d:
 G[d[x]]=x
print(G)
```

2

(e) How are dictionaries different from lists?

2

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