



BRAIN INTERNATIONAL SCHOOL

SESSION 2024-25

CLASS: XI

TERM 1 REVISION SHEET

SUBJECT: CS

Chapter 1 : Computer System Overview

1. What is Language Processor? Give examples.
2. Write two difference between RAM and ROM.
3. Explain briefly the functions of operating System.
4. Explain IPO cycle.
5. Explain Secondary memory devices of Computer System
6. Differentiate between Primary memory and Secondary memory.

Ch 4 : Introduction To Problem Solving Ch 5 : Getting started with Python

Ch 6 : Python Fundamentals Ch-7 : Data Handling

Q1. What will be the ouput of the following code?

(a) $5 < 5$ or 10 (b) $5 < 10$ or 5 (c) $5 < (10 \text{ or } 5)$ (d) $5 < (5 \text{ or } 10)$

Q2. What will be the ouput of the following code statements?

(a) $17\%5$ (b) $17\%5.0$ (c) $(17\%5) = (17\%5)$ (d) $(17\%5.0) = (17\%5.0)$

Q3. What will be the ouput of the following code?

```
x,y=4,8
```

```
z=x/y*y
```

```
print(z)
```

Q4. Why is Python interpreted?

Q5. What are mutable and immutable types in Python? List both of them.

Q6. What is user-defined Function in Python? Explain with Program.

Q7. Explain the two types of Type casting in Python.

Q8. Write any two features of Python.

Q9. Write two difference between compiler and interpreter.

Q10. Write two difference between RAM and ROM.

Q11. Define range() function with the help of syntax

Q12. Evaluate the following expressions.

(a) $(2+3) * 5//4 + (4+6)/2$

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

(c) $12\%5 * 3 + (2*6)//4$

Ch-8: Introduction to Python modules

Q1. Study the following program and select the possible output(s) from the options (i) to (iv) following it. Also, write the maximum and the minimum values that can be assigned to the variable p.

```
import random
languages=['Python','Java','PHP', 'HTML','C++ ']
p= random.randint(1,4)
for i in range(0,p+1) :
    print(languages[c],end= '&')
```

- (i) Python&Java&PHP&HTML&C++&
- (ii) Java&PHP&HTML&C++&
- (iii) Python&Java&
- (iv) Python&Java&PHP&

Q2. Explain Random Module in Python.

Q3. What will the following code produce?

```
import random
print(random.random( ) * 100)
print(random.random( ))
```

Q4. Explain any 3 Math module functions with Examples

Ch- 3 : Boolean Logic

1. Define Boolean Algebra.
2. Draw the logic circuit for the following Boolean expression using Basic logic gates. (3 Marks)
 - (1) $F = A.B.C' + B.C' + A.B'$
 - (2) $F = (X + Y') . (X + Z')$
 - (3) $F = A'.B' + A.B$
3. State De Morgan's Law and its two theorems. Prove any one of its theorem.

Ch-9: Flow of Control

1. Find the errors in the following code and correct it by rewriting the code and underline the corrections.

```
x = int("Enter the value for x:")  
for in range[0,11]:  
    if x =y  
        print x+y  
    else  
        Print x-y
```
2. WAP in Python to swap two numbers without using a third variable.
3. WAP in Python to calculate and display the factorial of an inputted number.(using for loop)
4. WAP in Python to enter a number and check whether it is a prime number or not.(using for loop)
5. WAP in Python to check wheher the number is Palindrome or not.

Ch- 10 : String Manipulation

- 1.Explain membership operators in string.
- 2 Define String concatenation with Example
- 3.WAP in Python that reads a string and checks whether it is a palindrome string or not.

4. WAP in Python to input a string and print number of upper case and lower case letters in it.
5. Find the output of the following code
- ```
S1 = "@@Python is fun@@"
print(S1 [::-2])
```
6. How many times is the word "Python" printed in the following statement?
- ```
s='I like Python'
for ch in s[3:8]:
    print('Python')
```
- (a) 11 times (b) 8 times (c) 3 times (d) 5 times
7. Which of the following is not a valid string operation?
- (a) Slicing (b) Concatenation (c) Repetition (d) Floor
8. Which of the following is not a Python legal string operations?
- (a) 'abc' + 'abc' (b) 'abc' * 3 (c) 'abc' +3 (d) 'abc'.lower()

Ch-2 : Data Representation

1. Perform the following conversions.
- (a) $(1010111)_2 = ()_{10}$
- (b) $(76F)_{16} = ()_{10}$
- (c) $(3619)_{10} = ()_{16}$
- (d) $(11100.1010)_2 = ()_{16}$
- (e) $(514)_8 = ()_{10}$
- (f) $(17.35)_{10} = ()_2$
2. Hexadecimal number System is composed of_____ ?
- (a) 2 symbols (b) 10 symbols (c) 8 symbols (d) 16 Symbols
3. What is the base of Octal number system?
- (a) 2 (b) 10 (c) 8 (d) 16