

THE ARMY PUBLIC SCHOOL, DHAULA KUAN
HALF YEARLY EXAMINATION (2020-21)
CLASS : XI
SUBJECT : COMPUTER SCIENCE

TIME : 1.5 HRS

SET A

MM: 40

<p>Q1</p> <p>(a) _____ program is responsible for loading programs and libraries from secondary storage device into main memory. [1/2]</p> <p>(i) System software program (iii) application software program (ii) Utility (iv) library</p> <p>(b) What type of input device is considered in PDA/ Smart phones [1/2]</p> <p>(i) Touch screen (ii) OCR (iii) smart card reader (iv) keyboard</p> <p>(c) Which of the following is not an assignment operator? [1/2]</p> <p>i.) **= (ii.) /= (iii.) == (iv.) %=</p>
<p>Q2: Two statements about interpreters & compilers are given below. Identify which holds true for compiler or an interpreter.</p> <p>a) Translates the entire program at one go. [1/2]</p> <p>b) Stops the translation process as soon as the first error is encountered. [1/2]</p>
<p>Q3 Predict the output:</p> <p>(a) x=3 [1/2]</p> <p> if x>2 or x<5 and x==6: print("ok") else: print("no output")</p> <p>(b) x,y=2,4 [1]</p> <p> y,x,y=3,x+y,12 print(x,y)</p>
<p>Q4(a) Ishita wrote following statement on python prompt to get value of $(3^2)^3$ that is 729 [1]</p> <p> >>> 3**2**3</p> <p> And got the output as 6561. Give reason and correct the statement.</p> <p>(b) Write the type of tokens from the following. [1]</p> <p> i. _Var ii. in</p>

Q5 Write python statements of the following :

- (a) to find the remainder of 65 when divided by 4. [1]
(b) Swap values of two variables temp1 and temp2 in a single statement [1]

Q6 (a) Write following expressions in python $x = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$ [1]

(b) Write an appropriate for loop for the situations described below:

- (i) A loop is to be repeated 20 times [1]
(ii) A loop is to be processed till 200 starting from 100. Print all even numbers between the loop. [1]

(c) What will the code produce ? [1]
`print(type(1/2))`

(d) Convert Octal number $(572)_8$ to its equivalent hexadecimal number. [2]

Q7(a) What will be the error in the following code (correct it): [2]

```
A=input("enter value for a")
B=int(input("enter value of b")
if(A>B)
    print("A")
    A+5=A
else:
    print("B")
print(" is greater")
```

(b) What is the use of identity operator? Explain with the help of an example. [2]

(c) What will be the size of the following constants? [2]
(a) "reena's" (b)"This is \a file"

Q8(a) Identify and correct the errors in the following statements: [2]

i) elif = 12.5 ii) 1stnumber = 10 iii) hello = 6 iv) feeamt# = 6000

(b) What is the output produced by the following code? [2]

```
x=1
if x>3:
    if x>4:
```

```
print('A',end='#')
else:
    print('B',end='$' )
elif x<2:
    if (x!=0):
        print('C', end='@' )
print('D')
```

Q9(a) Give the difference between the type casting(explicit type conversion) and automatic type conversion(implicit type conversion). Also, give a suitable python code to illustrate both. [2]

(b) What is escape sequence? Name any two escape sequences. [2]

(c) Differentiate between single quotes, double quotes and triple quotes [2]

Q10(a) Write a code to find the factorial of a no [2]

(b) Write a Python program that accepts a string and count the number of digits and letters. [3]

(c) Write a program that gets **2 string variable and 2 number variable** from the user, concatenates(joins them together with no spaces) and displays the string, then multiply the two numbers on a new line [2]

(d) Print -10 to -1 using for loop and display a message **“Done”** after successful execution of for loop [3]

