CLASS - XI (CBSE)

MCQ EXAMINATION : 2020-21

Candidate's Name in CAPITAL letters | Sec.

Branch

Roll No. : | Candidate's Signature | Invigilator's Signature

TIME : 2 Hrs. Date : _____ **M.M. : 100**

INSTRUCTIONS FOR OMR SHEET :-

1. **Attempt ALL the questions:**
2. **Use only black or blue (ball pen) for darkening/writing in appropriate oval/box.**
3. **While darkening the oval / box it is to be ensured that these are darkened completely.**
4. **OMR sheet shall not be folded or tampered in any way.**
5. **Over writing / erasing / dual data / use of correction fluid will render OMR sheet invalid.**

Subject : COMPUTER SCIENCE

Q.1- Python programs/scripts are stored in files with _____ extension.
a. .pt b. .py
c. .pyt d. None of these

Q.2- Python code can run on a variety of platforms. It means python is a _____ language.
a. good platform
b. cross platform
c. super platform
d. dual platform

Q.3- Who developed Python language?
a. Dennis Ritchie
b. Guido Van Rossum
c. Carl Hooper
d. None of these

Q.4- Data items having fixed values are called _____.
a. Identifiers b. Puncuators
c. Literals d. Keywords

Q.5- Escape sequences are treated as _____.
a. Strings b. Characters
c. Integers d. None of these

Q.6- Which of the following can be used to create comments ?
a. # b. //
c. * d. None of these

Q.7- Which of the following is an escape sequence for a newline character?
a. \n b. \a
c. \t d. \b

Q.8- Which of the following functions print the output to the console?
a. output( ) b. print( )
c. echo( ) d. None of these

Q.9- Which function is used to get ASCII value of a character?
a. chr( ) b. ascii( )
c. ord( ) d. none of these

Q.10- Value 615000.0 is equivalent to :
a. 615E3 b. 615E - 3
c. 0.615E3 d. none of these

Q.11- Which of the following is not an immutable type in python?
a. string b. tuple
c. List d. None of these

Q.12- What is the value of the expression 100 % 30 ** 2?
a. 9 b. 6.66
c. 100 d. None of these

Q.13- What is the output of the following?

```
a, b, c = 10, 20, 30
d = a - b * c/b
print(d)
```

a. -15 b. -20
c. -10 d. None of these

Q.14- What is the value of the expression 10 or 0?
a. True b. False
c. 0 d. None of these

Q.15- What will be the value of the followin gexpression ?
not (1 ==1 and 0 != 1)?
a. True b. False
c. 0 d. None of these

Q.16- What is the value of the expression?
>>>bool(8) and bool(0)
a. 8 b. True
c. False d. None of these

Q.17- median( ) function is stored in which python module?
a. random b. statistics
c. math d. none of these

Q.18- What will be output of the following python code?
```
a = 5 - 4 - 3
b =3 ** 2 ** 3
print(a, end = "*")
print(b)
```
a. -2 * 6561 b. -2 * 729
c. -2 * 18 d. none of these

Q.19- What will be the output of the following?
print(True or False and not (False))
a. False b. True
c. not d. None of these

Q.20- The _____ data type allows only True/False values .
a. integer b. boolean
c. float d. none of these

Q.21- What is the output of the following?
```
for i in range(20, 1, -2):
if i >= 10:
print(i)
```
a. 20 18 16 14 12
b. 12 14 16 18 20
c. 2 4 6 8 10
d. None of these

Q.22- What is the output of the following?
```
for i in range(65, 70, 2):
print(chr(i), end = '#')
```
a. 65 # 67 # 69 #
b. A # B # C #
c. A # C # E #
d. None of these

Q.23- What is the output of the following?
```
a = 0
fori in range(4,8):
if i%2 == 0:
a = a + 1
print(a)
```
a. 4 5 6 7 b. 12
c. 10 d. None of these

Q.24- Function range(3) is equivalent to _____.
a. range(0, 3) b. range(1, 3)
c. range(3, 0) d. None of these

Q.25- Which of the following is not a valid looping statement in python?
a. for b. if-else
c. while d. None of these

Q.26- Which of the following is an entry controlled loop in python?
a. do-while b. while
c. if-else d. None of these

Q.27- The break and continue statements, together are called _____ statements.
a. jump b. loop
c. nest d. none of these

Q.28- How many times is the word 'Computer' printed in the following statement.
```
s = "Computer Science"
forch in s[3 : 8]:
print('Computer')
```
a. 11 times b. 5 times
c. 3 times d. 8 times

Q.29- A loop may contain another loop in it's body, This form of loop is called _____ loop.
a. continue b. double
c. nested d. none of these

Q.30- What will be the output of the following python code?
```
x = "abcba"
j = -1
for i in range(len(x)//2):
print(x[i], "#" ,x[j])
    j = j - 1
```
a. a # a b. a # b
c. a # b d. none of these

Q.31- What is the index number of the last character of a string?
a. 0 b. 1
c. 100 d. None of these

Q.32- This string function returns a copy of the string with it's first character capitalized.
a. upper( ) b. title( )
c. lower( ) d. none of these

Q.33- Which of the following is/are illegal Python string operation?
a. 'abc'+'abc' b. 'abc' * 3
c. 'abc' + 3 d. None of these

Q.34- Which of the following function will return a list containing all the words of the given string?
a. split( ) b. index( )
c. count( ) d. None of these

Q.35- What would the following expression return when executed in Python shell?
>>> "Hello World".find("Wor",1,6)
a. True b. 6
c. -1 d. None of these

Consider the following code and answer the questions from question (36 to 40):

```
inputstr = input("Give me a string:")
bigint = 0
littleint = 0
otherint = 0
forele in inputstr:
ifele> = 'a'andele <= 'm':   #Line1
littleint = littleint+1
elifele>'m'andele<='z':
bigint = bigint+1
else:
otherint = otherint+1
print(bigint)                #Line2
print(littleint)             #Line3
print(otherint)              #Line4
print(inputstr.isdigit())    #Line5
```

Q.36- Given the value of inputstr "abcd" what output is produced by line 2 ?
a. 0 b. 1
c. 4 d. None of these

Q.37- Given the input "Hi Mom" what output is produced by line 3 ?
a. 0 b. 2
c. 3 d. None of these

Q.38- Given the input "Hi Mom" what output is produced by line 4 ?
a. 0 b. 2
c. 3 d. None of these

Q.39- Given the input "1 + 2 = 3" what output is produced by line 5?
a. True b. False
c. -1 d. None of these

Q.40- Given the input "1 + 2 = 3" what output is produced by line 2?
a. 0 b. 3
c. 5 d. None of these

Q.41- What is the full form of CPU?
a. Computer Processing Unit
b. Computer Principle Unit
c. Central Processing Unit
d. None of these

Q.42- Which of the following is not a characteristic of a computer?
a. Versatility b. Accuracy
c. I.Q. d. None of these

Q.43- Which of the following is the smallest unit of data in a computer?
a. Bit b. KB
c. Byte d. None of these

Q.44- Which of the following is not a type of computer code?
a. EDIC b. ASCII
c. BCD d. None of these

Q.45- Which of the following is designed to control the operations of a computer?
a. User
b. Application Software
c. System Software
d. None of these

Q.46- Which unit is responsible for converting the data received from the user into a computer understandable format?
a. Memory Unit
b. Arithmetic & Logic Unit
c. Input Unit
d. None of these

Q.47- The only language which the computer understands is _____ .
a. Assembly Language
b. Binary Language
c. BASIC
d. None of these

Q.48- 1 yottabyte = _____
a. 1024 TB b. 1024 EB
c. 1024 ZB d. None of these

Q.49- _____ is the raw material used as input and _____ is the processed data obtained as output of data processing.
a. Data, Instructions
b. Instructions, Program
c. Data, Program
d. None of these

Q.50- A computer program that translates one statement of program instructions at a time into machine language is called _____ .
a. CPU b. Interpreter
c. Compiler d. Simulator

Q.51- How many digits are there in binary number system?
a. One b. Two
c. Three d. None of these

Q.52- Decimal number is repeatedly divided by ____ to obtain its equivalent hexadecimal number.
a. 2 b. 10
c. 8 d. None of these

Q.53- In hexadecimal system, each alphanumeric digit is represented as a group of ____ binary digits.
a. 3 b. 4
c. 2 d. None of these

Q.54- Octal equivalent of decimal number 122 is ____ .
a. 172 b. 173
c. 174 d. None of these

Q.55- Which is the Most Significant Bit(MSB) in 010101?
a. 0 b. 1
c. Both (a) & (b) d. None of these

Q.56- Equivalent binary number of decimal number 0.25 is ____ .
a. 0.11 b. 0.00
c. 0.01 d. 1.00

Q.57- To convert binary number 10101100 to octal number we will make 3 bit groups from ____ .
a. Right to left b. Left to right
c. Either way d. None of these

Q.58- Decimal number equivalent to binary number 1110101 is ____ .
a. 117 b. 165
c. 75 d. 175

Q.59- Binary representation of the hexadecimal number 98E is ____ .
a. 100110001111
b. 100110001110
c. 100110101110
d. None of these

Q.60- Octal representation of the hexadecimal number A7B is ____ .
a. 5175 b. 5174
c. 5173 d. None of these

Q.61- According to Boolean law : A + 1 = ?
a. 1 b. A
c. 0 d. None of these

Q.62- (A')' = ?
a. 1 b. 0
c. A d. None of these

Q.63- De Morgan's theorem states that ____ .
a. (A.B.' = A'+B'
b. (A+B.' = A'.B'
c. Both (a) and (b)
d. None of these

Q.64- Electronic circuits that operate on one or more input signals to produce standard output ____ .
a. Logic signals
b. Logic gates
c. Series Circuits
d. None of these

Q.65- A ____ gate gives the output as 1 only if all the input signals are 1.
a. AND b. OR
c. NAND d. None of these

Q.66- The gate which is used to reverse the output obtained is ____ .
a. NOR b. NOT
c. NAND d. None of these

Q.67- The universal gate that can be used to implement any Boolean expression is ____ .
a. NOR b. EXOR
c. OR d. None of these

Q.68- How many AND gates are required to realize the following expression Y = AB + BC.
a. 4 b. 2
c. 1 d. None of these

Q.69- What logic function is produced by adding an inverter to the output of an AND gate?
a. NAND b. NOR
c. XOR d. None of these

Q.70- Which type of logic is following table showing?

A	B	Output
0	0	0
0	1	1
1	0	1
1	1	0

a. AND b. OR
c. EXOR d. None of these

Q.71- The operation represented by a parallelogram in flowchart is ____ .
a. Input/Output
b. Assignment
c. Comparison
d. None of these

Q.72- Part of algorithm which is repeated for the fixed number of times is classified as _____ .

a. Iteration b. Selection
c. Sequence d. None of these

Q.73- A _____ is a directed graph that describes the flow of execution control of the program.

a. Flowchart b. Algorithm
c. Psuedocode d. None of these

Q.74- An algorithm is a _____ set of precise instructions for performing computation.

a. Infinite b. Finite
c. Constant d. None of these

Q.75- Which of the following is incorrect? Algorithms can be represented as

a. Pseudo codes b. Syntax
c. Programs d. None of these

Q.76- Following is the truth table of a three input logic gate. What values to be filled in place of ?1? and ?2?

A	B	C	Output
0	0	0	0
0	0	1	1
0	1	0	1
0	?1?	1	0
1	0	0	0
?2?	0	1	1
1	1	0	1
1	1	1	0

a. 1 and 1 b. 0 and 1
c. 1 and 0 d. None of these

Q.77- Out of the following which property algorithms does not have?

a. Input b. Finiteness
c. Constancy d. None of these

Q.78- Keep the statement language _____ while writing a pseudo code.

a. Dependent b. Independent
c. Case Sensitive d. None of these

Q.79- In problem solving life cycle which is endless phase?

a. Design b. Coding
c. Maintenance d. None of these

Q.80- Which of the following helps in updating of software?

a. Documentation
b. Flowchart
c. Both (a) and (b)
d. None of these

Q.81- List can contain values of these types :

a. integers b. floats
c. lists d. tuples

Q.82- Which of the following will create an empty list?

a. L = [1]
b. L = list(0)
c. L = list( )
d. L = List(empty)

Q.83- Which of the following will return the last element of a list L with 5 elements ?

a. L[5] b. L[4]
c. L[-2] d. L[6]

Q.84- If L = [1, 2] then L * 2 will yield

a. [1, 2] * 2 b. [1, 2, 2]
c. [1, 1, 2, 2] d. [1, 2, 1, 2]

Q.85- If L1 = [1, 3, 5] and L2 = [2, 4, 6] then L1 + L2 will yield

a. [1, 2, 3, 4, 5, 6]
b. [1, 3, 5, 2, 4, 6]
c. [3, 7, 11]
d. [1, 3, 5, [2, 4, 6]]

Q.86- Given a list L = [10, 20, 30, 40, 50, 60, 70], what would L[1:4] return?

a. [10, 20, 30, 40]
b. [20, 30, 40, 50]
c. [20, 30, 40]
d. [30, 40, 50]

Q.87- Given a list L = [10, 20, 30, 40, 50, 60, 70], what would L[2 : -2] return?

a. [10, 20, 30, 40]
b. [20, 30, 40, 50]
c. [20, 30, 40]
d. [30, 40, 50]

Q.88- Given a list L = [10, 20, 30, 40, 50, 60, 70], what would L[-4 - : 1] return?

a. [20, 30, 40]
b. [30, 40, 50]
c. [40, 50, 60]
d. [50, 60, 70]

Q.89- Given a list L = [10, 20, 30, 40, 50, 60, 70], what would L[-3 : 99] return?

a. [20, 30, 40]
b. [30, 40, 50]
c. [40, 50, 60]
d. [50, 60, 70]

Q.90- To find the last element of list namely 'smiles' in Python, _____ will be used.

a. smiles[0]
b. smiles[-1]
c. smiles[lpos]
d. smiles[:-1]

Q.91- Which of the following creates a tuple?

a. tuple1 = ("a" , "b")
b. tuple1[2] = ("a","b")
c. tuple1 = (5) * 2
d. None of these

Q.92- Choose the correct option with respect to Python.

a. Both tuples and lists are immutable.
b. Tuples are immutable while lists are mutable.
c. Both tuples and lists are mutable.
d. Tuples are mutable while lists are immutable.

Q.93- Choose the correct option.

a. In Python, a tuple can contain only integers as its elements.
b. In Python, a tuple can contain only strings as its elements.
c. In Python, a tuple can contain both integers and strings as its elements.
d. In Python, a tuple can contain either string or integer but not both at a time.

Q.94- What will be the output of below Python code?

```
tuple1 = (5, 1, 7, 6, 2)
tuple1.pop(2)
print(tuple1)
```

a. (5, 1, 6, 2)
b. (5, 1, 7, 6)
c. (5, 1, 7, 6, 2)
d. Error

Q.95- What will be the output of below Python code?

```
tuple1 = (2, 4, 3)
tuple3 = tuple1 * 2
print(tuple3)
```

a. (4, 8, 6)
b. (2, 4, 3, 2, 4, 3)
c. (2, 2, 4, 4, 3, 3)
d. Error

Q.96- Which of the following method will add a key to the dictionary if it does not already exist in the dictionary?

a. insert( )
b. fromkeys( )
c. update( )
d. setdefault( )

Q.97- Which of the method is used to create a new dictionary from a sequence with all the keys and a common value?

a. 1 insert( )
b. fromkeys( )
c. update( )
d. setdefault( )

Q.98- Which of the following is method removes and returns a key : value pair that follows LIFO order?

a. pop( )
b. remove( )
c. popitem( )
d. delete( )

Q.99- Which of the following copy option copies the upper layer whereas the inner referenced object is not copied?

a. Shallow copy
b. Deep Copy
c. Key copy
d. Partial copy

Q.100- What is the output of this code :

```
d = {'Ind' : 'ViratKohli' , 'MS Dhoni' : 'Ind' , 'NZ' : 'Kane Williamson'};
print(d['Ind'])
```

a. Virat Kohli
b. MS Dhoni
c. Ind
d. All of these