II TERM EXAMINATION : 2023-24
Class - XII (CBSE)
Subject - Computer Science (083)

Time : 3 hrs.   M.M.: 70

General Instructions :
- Please check this question paper contains 35 questions.
- The paper is divided into 4 Sections - A, B, C, D and E.
- Section A, consists of 18 questions (1 to 18). Each question carries 1 mark.
- Section B, consists of 7 questions (19 to 25). Each question carries 2 marks.
- Section C, consists of 5 questions (26 to 30). Each question carries 3 marks.
- Section D, consists of 3 questions (31 to 33). Each question carries 5 marks.
- Section E, consists of 2 questions (34 to 35). Each question carries 4 marks.
- All programming questions are to be answered using Python Language only.

SECTION - A

Q.1- State True or false:-
Relational operators return either True or False.

Q.2- Which of the following statement(s) would give an error during execution of the following code?
```
tup = (20, 30, 40, 50, 80, 79)
print(tup)            #Statement 1
print(tup[3]+50)      #Statement 2
print(max(tup))       #Statement 3
tup[4] = 80           #Statement 4
```
Options :
a. Statement 1   b. Statement 2   c. Statement 3   d. Statement 4

Q.3- State whether the following statement is True or False:-
An exception may be raised even if the program is syntactically correct.

Q.4- Given the following dictionaries :
dict_exam= {"Exam":"AISSCE", "Year" : 2023}
dict_result = {"Total" : 500, "Pass_Marks" : 165}

Q.5- Which statement will merge the contents of both dictionaries?
a. dict_exam.update(dict_result)
b. dict_exam + dict_result
c. dict_exam.add(dict_result)
d. diet exam.merge(dict result)

a.   b. r+   c. w+   d. None of these

Q.6- Which of the following statement(s) would give an error after executing the following code?
```
S = "Welcome to class XII"    # Statement 1
print(S)                      # Statement 2
S = "Thank you"               # Statement 3
S[0] = '@'                    # Statement 4
S = S + "Thank you"           # Statement 5
```
a. Statement 3
b. Statement 4
c. Statement 5
d. Statement 4 and 5

Q.7- Consider a declaration
L = (1, 'Python', '3.14').
Which of the following represents the data type of L?
   a. list   b. tuple   c. dictionary   d. string

Q.8- Which of the following options can be used to read the first line of a text file Myfile.txt?
   a.   myfile = open('Myfile.txt'); myfile.read( )
   b.   myfile = open('Myfile.txt','r'); myfile.read(n)
   c.   myfile = open('Myfile.txt'); myfile.readline( )
   d.   myfile = open('Myfile.txt'); myfile.readlines( )

Q.9- Assume that the position of the file pointer is at the beginning of 3rd line in a text file. Which of the following option can be used to read all the remaining lines?
   a.   myfile.read( )   b.   myfile.read(n)
   c.   myfile.readline( )   d.   myfile.readlines( )

Q.10- The return type of the input( ) function is :
   a.   string   b.   integer   c.   list   d.   tuple

Q.11- Which of the following operator cannot be used with string data type?
   a.   +   b.   in   c.   *   d.   /

Q.12- Which of the following components are part of a function header in Python?
   a.   Function Name   b.   Return Statement
   c.   Parameter List   d.   Both (a) and (c)

Q.13- Which of the following correct defination of character?
   a.   def cal_si(P = 200, r, t = 7)   b.   def cal_si(p = 100, r = 8, t)
   c.   def cal_si(p, r = 8, t)   d.   def cal_si(p, r = 8, t = 2)

Q.14- Which of the following character acts as default delimiter in a csv file?
   a.   (colon) :   b.   (hyphen) -   c.   (comma),   d.   (vertical line) |

Q.15- Which of the following statement opens a binary file record.bin in write mode and writes data from a list lst1 = [1, 2, 3, 4] on the binary file?
   a.   with open('record.bin','wb') as myfile:
        pickle.dump(Ist1, myfile)
   b.   with openfrecord.bin','wb') as myfile:
        pickle.dump(myfile, Ist1)
   c.   with open('record.bin', 'wb+') as myfile:
        pickle.dump(myfile, Ist1)
   d.   with open('record.bin', 'ab') as myfile:
        pickle.dump(myfile, Ist1)

Q.16- Identify the output of the following Python statements.:-
```
x = 2
while x < 9:
    print(x, end=')
    x = x + 1
```
   a.   12345678   b.   123456789   c.   2345678   d.   23456789

Q.17 and Q. 18 are assertion and reasoning based questions. Mark the correct choice as :
   (a)   Both A and R are true and R is the correct explanation for A.
   (b)   Both A and R are true and R is not the correct explanation for A
   (c)   A is True but R is False
   (d)   A is false but R is True

Q.17- *Assertion (A)* :   If the arguments in function call statement match the number and order of arguments as defined in the function definition, such arguments are called positional arguments.

Reason (R)   : During a function call, the argument list first contains default argument(s) followed by positional argument(s).

Q.18- *Assertion (A)* :   Access mode 'a' opens a file for appending.

Reason (R)   : The file pointer is at the end of the file if the file exists.

SECTION - B

Q.19- Write a function in python to count the number of lines in a text file 'STORY.TXT' which is starting with an alphabet 'A' ?

Q.20- Evaluate the following expressions :

a.   6 * 3 + 4**2 // 5 - 8

b.   10 > 5 and 7 > 12 or not 18 > 3

Q.22- Find and write the output of the following Python code :

```
def Display(str):
    m = " "
    for i in range(0, len(str)):
    if(str[i].isupper( )):
        m = m + str[i].lower( )
    elif str[i].islower( ):
        m = m + str[i].upper( )
    else:
        if i % 2 == 0:
            m = m + str[i - 1]
        else :
            m = m +"#"
    print(m)
Display('Fun@Python3.0')
```

Q.23- Predict the output of the Python code given below :

```
tuplel = (11, 22, 33, 44, 55, 66)
list1 = list(tuplel)
new_list = [ ]
for i in list1 :
    if i%2 == 0:
        new_list.append(i)
new_tuple = tuple(new_list)
print(new_tuple)
```

Q.24- Write a function, ***countwords (STRING)***, that takes a string as an argument and returns a tuple containing length of each word of a string.

For example, if the string is "***I Love India***", the tuple will have **(1, 4, 5)**

Q.25- Write difference between Text and Binary file.

SECTION - C

Q.26- Write a function in Python that counts the number of "Me" or "My" words present in a text file "STORY.TXT".

OR

Define 'r' , 'w' and 'a' file opening mode in Python.

Q.27- Write a function AMCount( ) in Python, which should read each character of a text file STORY.TXT, should count and display the occurance of alphabets A and M (including small cases a and m too).

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Q.28- Write a Python code to input string and count upper case and lower case letters separately.

Q.29- Write a Python code to input student's name, roll no. and mobile no and store it into a csv file called "studetails.csv".

Q.30- Define the function of seek( ) and tell( ) function.

SECTION - D

Q.31- What is the purpose of File handling? Define different types of files where data can be stored.

Q.32- Create file phonebook.dat that stores the details in following format :

Name Phone

Ajay   9856985645
Anil   5265859845
Raj   8595966332

Obtain the details from the user.

Q.33- Define Actual and Formal arguments. Write a function to input a string and count number of words into it.

SECTION - E

Q.24- Rahul is writing a program to read lines from a text file "mynotes.txt" and display those lines, which are starting with the alphabet "K". He is having some doubts so he has left few blank spaces. Fill these spaces with correct entries.

```
def display ( ):
        file =open('_____', "_____")    # Statement 1 and 2
        line = file.readline( )
        while line:
                if line[0]== '_____':      # Statement 3
                        print (line)
                        line = file._____     # Statement 4
        display( )
        file.close( )
```

Q.35- What do you mean by function? Explain the following functions:-
a.   sqrt( )   b. pow( )   c.   upper( )   d.   ceil( )

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