



D.A.V. GROUP OF SCHOOLS, CHENNAI & RANIPET  
COMMON TERM – I EXAMINATION – 2021-2022  
COMPUTER SCIENCE

Time : 90 Minutes

Max. Marks : 35

Class : XI

Date : 28.10.2021

**General Instructions:**

- The question paper is divided into 3 Sections - A, B and C.
- Section A, consists of 25 Questions (1-25). Attempt any 20 questions
- Section B, consists of 24 Questions (26-49). Attempt any 20 questions.
- Section C, consists of 6 case study based Questions (50-55). Attempt any 5 questions.
- All questions carry equal marks.

| Q.N. | Section-A   |
|------|---|
|      | <b>This section consists of 25 Questions (1 to 25). Attempt any 20 questions from this section. Choose the best possible option.</b>  |
| 1    | Which of the following are valid identifiers?<br><br>a) my name<br>b) <u>myname</u><br>c) 2myname<br>d) my-name   |
| 2    | Which symbol denotes the python prompt?<br><br>a) \$<br>b) <u>#</u><br>c) >>><br>d) //  |
| 3    | Pick out the correct output for the following code from the options given below:<br><br><pre>for i in range(-12,-1,3):<br/>    print(i,end='#')<br/>    if i%6==0:<br/>        print(i,end='@')<br/>else:<br/>    print(i)</pre><br>a) -12#-12@-9#-6#-6@-3#<br>b) <u>-12#-12@-9#-6#-6@-3#-3</u><br>c) -12#-9#-9@-6#-3#-3@-3<br>d) -12#-9#-9@-6#-3#-3@ |
| 4    | Arrange Terabyte(TB), Zettabyte(ZB) and Gigabyte(GB) in increasing order.<br><br>a) TB , ZB , GB<br>b) <u>GB , TB , ZB</u><br>c) ZB , TB , GB<br>d) None of the above   |
| 5    | How many times is the word "Hello" printed in the following code?<br><br><pre>s="DHoNI ipL Virat"<br/><br/>for ch in s[-3:-8:-2]:<br/><br/>    print("Hello" )</pre>  |

|    |   |
|----|---|
|    | <ul style="list-style-type: none"> <li>a) 5</li> <li>b) infinite</li> <li>c) 3</li> <li>d) 8</li> </ul>   |
| 6  | <p>Which of the following is not correct about python?</p> <ul style="list-style-type: none"> <li>a) Python is an open source language.</li> <li>b) Python is based on ABC language.</li> <li>c) Python was developed by Guido Van Rossum</li> <li>d) None of the above</li> </ul>                            |
| 7  | <p>Evaluate and find the output of the following expression:</p> <p><math>4+3**2\%(6-10)/8</math></p> <ul style="list-style-type: none"> <li>a) 4.0</li> <li>b) -3.375</li> <li>c) 3.625</li> <li>d) 5.75</li> </ul>  |
| 8  | <p>Python uses a/an ..... to convert source code to object code.</p> <ul style="list-style-type: none"> <li>a) Compiler</li> <li>b) Interpreter</li> <li>c) Combination of Interpreter and compiler</li> <li>d) Special virtual engine</li> </ul>   |
| 9  | <p>The result of bool(0) is False.</p> <ul style="list-style-type: none"> <li>a) True</li> <li>b) False</li> </ul>  |
| 10 | <p>In the Python statement <math>x = a + 5 - b</math> ,</p> <p><b>a</b> and <b>b</b> are .....</p> <ul style="list-style-type: none"> <li>a) Operators</li> <li>b) Expression</li> <li>c) Operands</li> <li>d) Equation</li> </ul>  |
| 11 | <p>In python, a variable may be assigned a value of one type, and then later assigned a value of a different type. This concept is known as .....</p> <ul style="list-style-type: none"> <li>a) Static typing</li> <li>b) Dynamic typing</li> <li>c) Parameter binding</li> <li>d) Dynamic linking</li> </ul> |
| 12 | <p>The binary equivalent of the octal Numbers 13.54 is.....</p> <ul style="list-style-type: none"> <li>a) 001011.101100</li> <li>b) 001001.111000</li> <li>c) 001101.101002</li> <li>d) None of these</li> </ul>  |
| 13 | <p>Which of the following are application software?</p> <ul style="list-style-type: none"> <li>a) Adobe Photoshop</li> <li>b) GIMP</li> <li>c) school management Software</li> <li>d) All of the above</li> </ul>   |

|    |  |
|----|--|
| 14 | Which one of the following is immutable data type?<br>a) List<br>b) String<br>c) Dictionaries<br>d) Sets   |
| 15 | Convert ( 889.25 ) <sub>10</sub> to ( ? ) <sub>8</sub><br>a) 1571.02<br>b) 1751.02<br>c) 1571.2<br>d) 571.2  |
| 16 | What is the output of the following code?<br><pre>k=0 for i in "Goodluck":     if 6&lt;=k&lt;10:         k+=6         print(k,end=' ')     elif k&lt;6:         k+=4         print(k,end=' ')     else:         break</pre><br>a) 4 8<br>b) 6<br>c) No output<br>d) 4 8 14         |
| 17 | An empty /null statement in Python is .....<br>a) \n<br>b) None<br>c) null<br>d) pass  |
| 18 | What will be the output produced by the following code?<br><pre>a="term-" for i in a:     if i.find('t')==False:         if a.endswith("m-"):             print(a.replace(i,chr((ord(i)-32))))</pre><br>a) No output<br>b) Term-<br>c) TERM-<br>d) tErm-<br>teRm-<br>terM-<br>term |
| 19 | Python allows _____ operations on string data type.<br>a) Concatenation<br>b) Membership<br>c) Slicing<br>d) All of the above  |



|  |   |
|--|---|
| 20   | <p>The octal integer literal and hexadecimal integer literals start with which of the following symbols respectively?</p> <p>a) O0, X0</p> <p>b) 0O, oX</p> <p>c) Oct0, Hex0</p> <p>d) 0o, 0x</p>   |
| 21   | <p>Which of the following statement is correct for 'and' operator?</p> <p>a) Python only evaluates the second argument if the first one is False</p> <p>b) Python only evaluates the second argument if the first one is True</p> <p>c) Python only evaluates True if any one argument is True</p> <p>d) Python only evaluates False if any one argument if False</p> |
| 22   | <p>What is the output of the following code?</p> <pre>True=False while True:     print(True)     break</pre> <p>a) True</p> <p>b) False</p> <p>c) Error message will be shown during execution.</p> <p>d) None of the above</p>   |
| 23   | <p>The two membership operators are .....and .....</p> <p>a) =, ==</p> <p>b) true , false</p> <p>c) in, not in</p> <p>d) is, is not</p>   |
| 24   | <p>What will the following command display?</p> <pre>print(len("Best of luck".upper().split('o')))</pre> <p>a) 3</p> <p>b) 2</p> <p>c) ['BEST','OF','LUCK']</p> <p>d) 1</p>   |
| 25   | <p>Special meaning words of Pythons, fixed for specific functionality are called .....</p> <p>a) Identifiers</p> <p>b) Functions</p> <p>c) Keywords</p> <p>d) Literals</p>  |
| <b>Section-B</b>   |   |
| <b>This section consists of 24 Questions (26 to 49).<br/>Attempt any 20 questions.</b> |   |
| 26   | <p>A token is also called a _____</p> <p>a) expression</p> <p>b) data type</p> <p>c) lexical unit</p> <p>d) operator</p>  |

- 27 What will be the value of Y after the following code fragment is executed ?
- ```
X=20.0
Y=(X>100.0) or X
```
- Error
  - True
  - False
  - ☒ 20.0
- 28 Fill the blank , in the following code , with the option given below , so that when executed , the output should be S.
- ```
c='y'
while c=='y':
    print('S')
    _____
```
- c='y'
  - continue
  - ☒ break
  - pass
- 29 Convert  $(11010011.10111)_2$  to  $(?)_{16}$
- E3.8B
  - ☒ D3.B8
  - B3.118
  - D3.18
- 30 Which of the following functions will always return a tuple of 3 elements?
- find()
  - ☒ index()
  - partition()
  - split()
- 31 Consider the following loop:
- ```
j = 10
while j >= 5:
    print("X")
    j=j-1
```
- Which of the following for loops will generate the same output as the loop shown previously?
- for j in range(-1, -5, -1):  
print("X")
  - for j in range(0, 5):  
print("X")
  - ☒ for j in range(10, -1, -2):  
print("X")
  - for j in range(10, 5):  
print("X")

|    |                                                                                                                                                                                                                                                                                                              |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 32 | Which of the following statement is not true?<br>a) RAM is an example of Primary memory<br>b) RAM is a non-volatile memory<br>c) ROM is slower than RAM.<br>d) None of the above                                                                                                                             |
| 33 | Which of the following statement is correct in accessing each element of string?<br><br>i)<br>a="Learning"<br>while(i):<br>print(i)<br><br>ii)<br>a="Learning"<br>for i in a:<br>print(i)<br><br>a) i only<br>b) ii only<br>c) Both i and ii<br>d) None of the above                                         |
| 34 | The operator used to check if both the operands reference the same object memory, is the ..... operator.<br><br>a) in<br>b) ==<br>c) id<br>d) is                                                                                                                                                             |
| 35 | What will be the output produced by the following code?<br><br>a, b, c = 1, 1, 1<br>d = 0.3<br>e = a+b+c-d<br>f = a+b+c == d<br>print(e)<br>print(f)<br><br>a) 2.7<br>False<br>b) 3.0<br>True<br>c) 2<br>False<br>d) 2.7 True                                                                                |
| 36 | Which of the following operator has its associativity from right to left?<br><br>a) +<br>b) //<br>c) %<br>d) **                                                                                                                                                                                              |
| 37 | <b>Assertion(A)</b> : You will get an error if you use double quotes inside a string that is surrounded by double quotes.<br><br><b>Example:</b><br><br>txt = "We are the so-called "Vikings" from the north."<br><br><b>Reason(R)</b> : The ONLY way to fix this problem, is to use the escape character \" |

- a) A is false and R is true
- b) A is true but R is not correct explanation of A, as there are alternate ways for the same.
- c) A and R both are false
- d) A is True and R is correct explanation of A

38 What will the following command display?

```
print('#'.join("12345"))
```

- a) #12345
- b) #12345#
- c) 1#2#3#4#5
- d) 1#2#3#4#5#

39 S="abcdef"

```
print(S._____('h'))
```

The above code when executed, gives a value error. Which function among the following will yield such an error?

- a) index
- b) endswith
- c) split
- d) find

40 What does the following Python program display ?

```
x = 3
if x == 0:
    print ("Am I here?", end = ' ')
elif not x == 5 and x==3:
    print("Or here?", end = ' ')
else:
    pass
print ("Or over here?")
```

- a) Or over here? Am I here?
- b) Or here?
- c) Am I here? Or here?
- d) Or here? Or over here?

41 What is the output of the following code?

```
for x in [1,2,3]:
    for y in range(2,4):
        if x+y>4:
            continue
        print(x*y,end='$')
```

- a) 2\$3\$4\$
- b) 2\$3\$4
- c) 3\$4\$6\$6\$9\$
- d) 1\$2\$3\$2\$4\$3\$

42 What is the output of the following code?

```
print("xyyzxyzxxyy".capitalize().count('Xyy', 0, 100))
```

- a) 2
- b) 0
- c) 1
- d) error message displayed



|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 43 | <p>Which of the following sequence is correct to convert decimal number to binary?</p> <p>Step 1: Note the remainder.<br/> Step 2: Divide the given number by 2.<br/> Step 3: Write the noted remainders in the reverse order (from bottom to top)<br/> Step 4: Keep on dividing the quotient by 2 and note the remainder till the quotient is zero.</p> <p>a) Step 1, Step 2, Step 3, Step 4<br/> b) Step 2, Step 1, Step 4, Step 3<br/> c) Step 3, Step 2, Step 1, Step 4<br/> d) Step 2, Step 3, Step 1, Step 4</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 44 | <p>Fill in the blanks with the appropriate option given below</p> <p># To count characters at same position in a given string (lower and uppercase characters) as in English alphabet.</p> <p><b>Example:</b> If the given string is "applE", the count characters should be 2, as 'a' and 'E' appears in the same position as their order in alphabets.</p> <pre>str1 = input("Input a string: ") count_chars = 0 for i in range(len(str1)):     if _____         count_chars += 1 print("Number of characters of the said string at same position as in English alphabet:") print(count_chars)</pre> <p>a) <math>(i == \text{ord}('A') - \text{ord}(\text{str1}[i]))</math> or <math>(i == \text{ord}('a') - \text{ord}(\text{str1}[i]))</math><br/> b) <math>(i == \text{chr}(\text{str1}[i]) - \text{chr}('A'))</math> or <math>(i == \text{chr}(\text{str1}[i]) - \text{chr}('a'))</math><br/> c) <math>(i == \text{ord}(\text{str1}[i]) - \text{ord}('A'))</math> and <math>(i == \text{ord}(\text{str1}[i]) - \text{ord}('a'))</math><br/> d) <math>(i == \text{ord}(\text{str1}[i]) - \text{ord}('A'))</math> or <math>(i == \text{ord}(\text{str1}[i]) - \text{ord}('a'))</math></p> |
| 45 | <p>Which of the following is a correct statement?</p> <p>a) <math>\text{xyz} = 10\ 100\ 1000</math><br/> b) <math>x\ y\ z = 10\ 100\ 1000</math><br/> c) <math>x, y, z = 10, 100, 1000</math><br/> d) <math>x\ y\ z = 10, 100, 1000</math></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 46 | <p>What will be the output of the following code?</p> <pre>print("Python is a Programming Language"[2:50:3].title())</pre> <p>a) To Sapormignug<br/> b) Index error<br/> c) Yoiaarrmgaue<br/> d) Tns Oai Na</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 47 | <p>Given a string object named s, for any index n, the following will give the reversed string.</p> <p>a) <math>s[:n-1] + s[n]</math><br/> b) <math>s[n] + s[n]</math><br/> c) <math>s[n-1] + s[n:-1]</math><br/> d) <math>s[n:] + s[:n-1]</math></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |



|    |                                                                                                                                                                                                      |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 48 | <pre> a=10 i = - a while i&lt;=a:     print( i == i+2)     i+=2 </pre> <p>How many times will the above loop be executed?</p> <p>a) 10 times<br/>b) 5 times<br/>c) 11 times<br/>d) infinite loop</p> |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|     |                                                                                                                                                                                                                                                                                                                                                 |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 49. | <p>What will be the output of the following code?</p> <pre> Msg="CompuTer" Msg1="" for i in range(0, len(Msg)):     if Msg[i].isupper():         Msg1=Msg1+Msg[i].lower()     elif i%2==0:         Msg1=Msg1+"*"     else:         Msg1=Msg1+Msg[i].upper() print(Msg1) </pre> <p>a) cO*P*t*R<br/>b) Co*p*t*R<br/>c) co*p*t*r<br/>d) cOP*tR</p> |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Section-C Case Study based Questions

This section consists of 6 Questions (50 -55)  
Attempt any 5 questions.

Mr. Ram joined recently in XYZ SOLUTIONS Ltd. During his training period he got the following code fragment to be solved. Help him to complete the partially filled code with appropriate statements to complete the task.

''' Program to accept a string and print the following:

- 1.sum of the digits in a given string
- 2.print the number of words in a given string.
3. concatenate the sum of the digits at the end of the string and display '''

s=\_\_\_\_\_ ("Enter a string:") // Statement 1

sum=0

for i in range(len(s)) //Statement 2

if i isdigit()== True //Statement 3

sum+=\_\_\_\_\_ //Statement 4

print("Sum of digits is :",sum)

print("Number of words in a given string",\_\_\_\_\_) // Statement 5

print("Sum of the digits concatenated at the end of the string",\_\_\_\_\_)  
//Statement 6

|    |                                                                                                                                                                    |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 50 | Choose the correct option from the following for <b>statement 1</b><br><br>a) int()<br>b) int(input)<br>c) input<br>d) Input(Str)                                  |
| 51 | Choose the correct option from the following for <b>statement 2</b><br><br>a) range(len(s))<br>b) s<br>c) range(len(s)-1,-1,-1)<br>d) len(s)                       |
| 52 | Choose the correct option from the following for <b>statement 3</b><br><br>a) isdigit(), True<br>b) isalnum(), True<br>c) isalpnum (),False<br>d) isdigit(), False |
| 53 | Choose the correct option from the following for <b>statement 4</b><br><br>a) int(s[ i ])<br>b) i<br>c) int(i)<br>d) ord(i)                                        |
| 54 | Choose the correct option from the following for <b>statement 5</b><br><br>a) s.split()<br>b) split(s)<br>c) len(s.split())<br>d) len(s.partition())               |
| 55 | Choose the correct option from the following for <b>statement 6</b><br><br>a) s+chr(sum)<br>b) s+sum<br>c) ord(sum)+s<br>d) s+str(sum)                             |