

- Q.7 `t1=(2,3,4,5,6)` 1
`print(t1.index(4))`
 Output is:
 i) 4 ii) 5 iii) 6 iv) 2
- Q.8 What is the length of the tuple shown below? 1
`t=(((('a',1),'b','c'),'d',2),'e',3)`
- Q.9 If `s="python programming"` 1
 What will be output of
`print(s[3:16:3])`
- Q.10 What is Dictionaries? How are dictionaries different from lists? 1
- Q.11 Add the binary numbers: 10110 and 1101 1
- Q.12 State and verify Involution law. 1
- Q.13 What shape represents a decision in a flowchart? 1
 i) A diamond ii) A rectangle iii) An oval iv) None of these
- Q.14 Write a program to input a name and print it. 1
- Q.15 Special meaning words of Python, fixed for specific functionality are called 1
 _____.
 i) Identifiers ii) functions iii) keywords iv) literals
- Q.16. Find out the error in following code fragment: 1
`Temperature = 90`
`Print Temperature`
- Q.17 What are nested lists? Give example. 1
- Q.18 A _____ is a computer program that can replicate itself and spread 1
 from one computer to another.
 i) Antivirus ii) Pendrive iii) Mouse iv) Computer Virus
- Q.19 Stealing someone else's intellectual work and representing it as own, is called 1

 i) Intellectual steal ii) Pluckism iii) Plagiarism iv) Pickism
- Q.20 What will the following code result in? 1
`L1 = [1,3,4,7,9]`
`print (L1 == L1.reverse ())`
- Q.21 What will be the output of the following statements? 1
`List1 = [12,32,65,26,80,10]`
`List1.sort()`
`print(List1)`

Section – II

Both the case study based questions are compulsory. Attempt any 4 subparts from each question. Each question carries 1 mark.

Q.22 Ms. Naseema is a computer science teacher created a list

List = [12,15,18,19,45,76,11,28,16]

- a. She wants to know the number of elements of list. Which function she should use to get answer. 1
- b. Ms. Naseema want to add two new elements 56,66 in the last. Which of the following is correct option? 1
 - i) List.append(56,66)
 - ii) List.insert(56,66)
 - iii) List.extend(56,66)
 - iv) List.extend([56,66])
- c. Ms. Naseema wants to show her students how to remove all the elements from the list. Please help her to write the python code for the same. 1
- d. She want to replace 19 with 99 in the list. Please help her to write correct code. 1
- e. How can she display list in ascending order? Write the code. 1

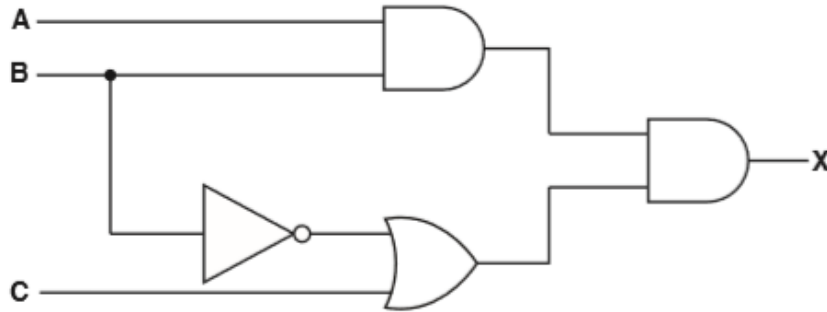
Q.23 a. After practicals, Atharv left the computer laboratory but forgot to sign off from his email account. Later, his classmate Revaan started using the same computer. He is now logged in as Atharv. He sends inflammatory email messages to few of his classmates using Atharu's email account. Revaan's activity is an example of which of the following cyber crime ? Justify your answer. 1

- (i) Hacking (ii) Identity theft (iii) Cyber bullying (iv) Plagiarism
- b. Should you use a nickname when you log on to the Internet? 1
- c. When you shop you always check the security of the website before you enter personal and credit card information. Comment. 1
- d. Is it all right to give your name, address and birth date when registering to use a website online? 1
- e. What measures should one take to avoid and maintain confidentiality of personal information? 1

Part - B
Section – I

Q.24 Draw the logic circuit for the Boolean expression: $F=AB' +(CD)'$ 2

Q.25 Write the equivalent Boolean expression for the following circuit: 2



Q.26 Expand the following terms: 2

- a) EEPROM b) DVD-RW c) CD-R d) SRAM

Q.27 Write python code to generate table of a input number. 2

Q.28 Write python code to check whether the given number is odd or even. 2

OR

Convert the following for loop into while loop–

for k in range(10,20,5):

 print(k)

Q.29 What is the difference between a keyword and an identifier? 2

OR

What is the difference between an Expression and a Statement in Python?

Q.30 Assume the following list definition in Python. 2

```
>>> letters = [ "a", "b", "o", "c", "p"]
```

What would be displayed in a python shell for each of the following expressions if they are evaluated in the given order? If it would give an error then write error.

a) >>> letters[-1]

b) >>> letters[len(letters)-2]

Q.31 What will be the output produced by the following code: 2

```
A, B, C, D = 9.2, 2.0, 4, 21
```

```
print(A/4)
```

```
print(A//4)
```

```
print(B**C)
```

```
print(A%C)
```

Q.32 a) Find the errors in following code fragment: 2

```
y=x+5
print(x,Y)
```

c) Find the errors in following code fragment: (The input entered is XI)

```
c=int(input("Enter your class"))
print("Your class is",C)
```

Q.33 State and verify Absorption law in Boolean Algebra using truth table. 2

Section – II

Q.34 Write a Python program to calculate the amount payable if money has been lent on simple interest. 3

Principal or money lent = P, Rate of interest = R, Time = T

Then Simple Interest (SI)=(P x R x T)/100

Amount Payable = Principal + SI

P,R and T are given as input to the program.

Q.35 Explain the basic units of the computer? Name the subunits that make up the CPU, and give function of each units. 3

Q.36 What will the output for following code? 3

```
S='Model Exams 2020 XI Computer Science'
L=S.split()
for I in L:
    if I[0]=='C':
        print('CS')
    elif I[0]=='E':
        print('Experiment')
    elif I.isdigit():
        print('2021')
    else print(I)
```

Q.37 Write a program to generate following pattern : 3

a) #####	b) *	c) 00000
#####	**	11111
#####	***	22222
#####	****	33333
#####	*****	44444

Section – III

Q.38 What is the difference between an Interpreter and a Compiler? 5

Q.39 Write a program to find the grade of a student when grades are allocated as given in the table below: 5

Percentage of Marks	Grade
Above 90%	A
80% to 90%	B
70% to 80%	C
60% to 70%	D
Below 60%	E

Percentage of the marks obtained by the student is input of the program.

Q.40 `s= "Welcome to python world"` 5

Write output for given statements:

- a) `print (s.isalpha())`
- b) `print (s.islower())`
- c) `print(s.upper())`
- d) `print(s.capitalize())`
- e) `print(s.title())`

OR

Results is a dictionary containing Name and Score of students in key: value pair.

Results= {"A":240,"B":340,"C":350,"D":280,"E":370}

Perform following operations on it.

- a) Print name of all the students having score >250
- b) Change marks of student "C" to 450.
- c) Calculate average score in this class.
- d) Add one more student with name "G" with score 290.
- e) Delete entry of student "C" from it.