# QP SUBMITTED BY
# SOMNATH PAULCHOUDHURY
## Unit Test 2 (2021-22) – FINAL PREP TEST
## CLASS XI SC
## SUB: COMPUTER SCIENCE(083)

**Time -2 hours**                                                                                                    **M. Marks- 50**

General Instructions:

1.      This question paper contains two parts A and B. Each part is compulsory.
2.              Part-A has 2 sections:
        Section – I It is short answer questions, to be answered in 1 to max 3 lines(2 marks).
        Section – II has two case studies questions. Each case study has 4 case-based sub-
        parts. An examine is to attempt any 4 out of the 5 sub parts.
3. Part - B is Descriptive Paper.
4. Part- B has three sections and some questions have internal choices
        Section-I is short answer questions of 2 marks each total 10 marks (2*5)
        Section-II is long answer questions of 3 marks each total 9 marks (3*3)
        Section-III is very long answer questions of 4 marks each total 8 marks (2*4)
5. Programming language is Python. Some questions may have internal options.

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| Q No | Part A | Marks |
|------|--------|-------|
| | Section-I – Q no 1 to 5 is compulsory, answer any five from 6 to 11 | 15 |
| 1 | Virus, spy ware or worm are collectively termed as _____. | 1 |
| 2 | What does Google Authenticator ensures? | 1 |
| 3 | What is protected by Section 29 of Trade Marks Act 1999? | 1 |
| 4 | Which license gives the right to share, use, and build upon a work that the author has created? | 1 |
| 5 | How can one guard the intellectual property (IP) right for a technical invention? | 1 |
| 6 | Identify active and passive digital footprints from these examples a. Browsing history b. Blogging c. Sign up for news letter d. Location | 2 |
| 7 | How is a Trademark beneficial for an enterprise? | 2 |
| 8 | In software field how is Apache License useful? | 2 |
| 9 | How snooping attack takes place? | 2 |
| 10 | Identify the domains protected by Intellectual Property Rights. | 2 |
| 11 | Which section of IT Act 2000 protects children from obscenity in electronic form? Is it bailable? | 2 |
| | Section-II Both the Case study based questions are compulsory. Attempt any 4 sub parts from each question. Each question carries 1 mark | 8 |
| 12 | Priyanka is given a list, colors=['orange','white','pink','red','green'] She gives commands in succession to sort the list, add a new color in the list and removes pink color from the list. Identify the commands or the outputs and fill in the blanks below | |
| | _____ Statement 1 is to sort the list | 1 |
| | >>> colors        She checks the sorted list | 1 |
| | _____ Statement 2 is the sorted list | 1 |

| | | |
|---|---|---|
| | _____ She adds the blue color in the list, Statement 3<br>_____ She takes out the pink color from the list, Statement 4<br>She gives this command now, what is the output?<br>>>> for i in colors:<br>    if(i[0]=='r'):<br>        print(i)<br>_____ Statement 5, the output | 1<br><br><br><br><br><br><br>1 |
| 13 | Kuldeep is given a Tuple, fourseasons=('winter','spring','summer','fall') and he has to change the name of the seasons in the tuple starting with a capital letter as fourseasons=('Winter','Spring','Summer','Fall'). Since tuple is immutable he needs to convert it to some mutable data type. Guess the steps and fill up the blanks with Python commands for the tasks<br>_____ Statement 1 changes the tuple to a list<br>_____ Statement 2 changes the element from 'winter' to 'Winter'<br>_____ Statement 3 changes the element from 'spring' to 'Spring'<br>_____ Statement 4 the list is back to tuple **after all conversions**<br>_____ Statement 5 Iterates the tuple and prints the odd indexes | 1<br>1<br>1<br>1<br>1 |
| | **Part – B** | |
| | Section-I | 10 |
| 14 | fourseasons=['Spring','Summer','Fall','Winter'] is a list. Give command to sort the list in reverse order. Write the output. | 2 |
| 15 | fourseasons=['Spring','Summer','Fall','Winter'] is a list. After the command fourseasons.extend(fourseasons[1:3]) is executed what is the length of the list? Write the changed list in correct order of the elements. | 2 |
| 16 | runs=[2,4,0,2,6,2] is a list that stores runs scored in an over. What is the mode of the list? Which module is to be imported to use the function? | 2 |
| 17 | Consider the list nums, **nums=[3,5,(4,6,1),2,3,8]**<br>What is the length of the list? What happens when we write, **nums[2]=3** | 2 |
| 18 | Consider the list L, L=[31,43,67,2,3] , fill in the blanks to show what is L now<br>L.insert(2,34) , L=_____<br>L.sort() , L= _____ | 2 |
| | Section- II | 9 |
| 19 | Let's consider a tuple, mytup=(10, 56, 43, 12, 10, 44, -65, 9, -110, -99) and two global empty lists, L1=[] and L2=[]. Write a function that accepts the tuple as a parameter and add the odd and even numbers in L1 and L2 and displays them. | 3 |
| 20 | Using random module and functions of the module assign 100 random numbers between 5 and 500 in a tuple, Y=tuple().<br>OR<br>Write the code for a function that accepts two tuples as parameters and swaps them and prints the tuple whose length is more. | 3 |
| 21 | Write a function that accepts a tuple say T=(10, 20, 30, 40, 50, 60, 70, 80, 90) and a number say **N**, and checks if the number is present in the tuple or not. | 3 |
| | Section-III | 8 |

| 22 | Complete the menu driven options using phonebook dictionary by writing all necessary function definitions for update (as shown) and query (when ans==2 is selected)

```
>>> while(True):
        print("1. Update phone book ")
        print("2. Query from phone book ")
        print("3. Exit")
        ans=int(input("Enter a choice "))
        if(ans==1):
                name=input("Enter a name for your friend ")
                phone=int(input("Enter a phone number "))
                updatephbk(name, phone)
                print(phonebook)
``` | 4 |
| --- | --- | --- |
| 23 | In the dictionary student_details as shown below 'abc' and 'mno' are the names and rest are marks obtained in five subjects. Traverse the dictionary to display only the names and average marks. NB. dict_keys([1, 2])
student_details={1:['abc',45,46,29,41,40],2:['mno',33,34,35,36,37]} | 4 |