## KENDRIYA VIDYALAYA SANGATHAN, VARANASI REGION SESSION ENDING EXAMINATION-2022 CLASS – XI (COMPUTER SCIENCE) <u>SAMPLE PAPER- MARKING SCHEME</u>

|     |     | SECTION A- 2 Marks                                                                                                                                                                                                                                                                                                                                                                                        |   |
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| Q.1 | (a) | d1={1:15,2:20, 3:30, 6:60, 7:70}                                                                                                                                                                                                                                                                                                                                                                          | 1 |
|     | (b) | One#Two#Three#Four                                                                                                                                                                                                                                                                                                                                                                                        | 1 |
| Q.2 |     | Python Library modules which need to be imported (1) random (2) math                                                                                                                                                                                                                                                                                                                                      | 2 |
| Q.3 |     | Open source software refers to any program whose source code is freely<br>available and open for use, study, modify and distribute without any<br>restriction.                                                                                                                                                                                                                                            | 2 |
|     |     | Example of OSS: Mozila FirFox, MySQL, Java, OpenOffice etc.                                                                                                                                                                                                                                                                                                                                               |   |
|     |     | Netiquette combines two words network and etiquette which describes<br>the set of rules for expected and acceptable online behavior while<br>working on Internet and social media platform.                                                                                                                                                                                                               |   |
|     |     | Some common Rules of Netiquette-                                                                                                                                                                                                                                                                                                                                                                          |   |
| 0.4 |     | 1: Remember that you are interacting with Human.                                                                                                                                                                                                                                                                                                                                                          | 2 |
| Q.4 |     | 2: Follow same standards of behavior online that you expect from pthers.                                                                                                                                                                                                                                                                                                                                  | 2 |
|     |     | 3: Respect other people's time and bandwidth                                                                                                                                                                                                                                                                                                                                                              |   |
|     |     | 4: Share expert knowledge                                                                                                                                                                                                                                                                                                                                                                                 |   |
|     |     | 5: Respect other people's privacy                                                                                                                                                                                                                                                                                                                                                                         |   |
|     |     | (any two suitable etiquette)                                                                                                                                                                                                                                                                                                                                                                              |   |
| Q.5 | (a) | (a) Arnav sent an email to his friend with a message saying that "I am sorry".                                                                                                                                                                                                                                                                                                                            | 1 |
|     | (b) | (a) He should provide all details as desired by caller.                                                                                                                                                                                                                                                                                                                                                   | 1 |
| Q.6 |     | Trojan Horse is a malicious program that seem good but actually perform<br>some malicious functions and can pass confidential data to its developer.<br>Unlike viruses, Trojan horses do not replicate themselves but they can be<br>destructive. For example, a program that claims to rid your computer of<br>viruses but instead introduces viruses onto your computer, may be called<br>Trojan Horse. | 2 |
| Q.7 |     | (1) [1,2,3,1,2,3] (2) [1,2,3,5,6,7]                                                                                                                                                                                                                                                                                                                                                                       | 2 |
| -   |     | OR                                                                                                                                                                                                                                                                                                                                                                                                        |   |
|     |     | (1) [10,14,22,30,34] (2) [10,20,30]                                                                                                                                                                                                                                                                                                                                                                       |   |
|     |     | SECTION B- 3 Marks                                                                                                                                                                                                                                                                                                                                                                                        |   |
| Q.8 |     | Discuss the following functions of Dictionary with suitable example:                                                                                                                                                                                                                                                                                                                                      | 3 |
|     |     | <ul> <li>(a) pop()</li> <li>(b) popitem()</li> <li>(c) items()</li> <li>(a) pop() : This method removes and returns the dictionary element associated to passed key.</li> <li><dict>.pop(key,<value>)</value></dict></li> </ul>                                                                                                                                                                           |   |
|     |     | (b) popitem() : Removes and returns the last inserted dictionary                                                                                                                                                                                                                                                                                                                                          |   |

| Q.9  | element<br><dict>.popitem()<br/>(c) This method returns all of the items in the dictionary as sequence<br/>of (key, value) tuples.<br/><li>listvariable&gt;=<dict>.items()<br/>(a) Possible output may be (ii) and (iv)</dict></li></dict>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3 |
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|      | <ul> <li>(b) Max value for START is 3 and END is 4</li> <li>(c) random() generates a float number in the range of 0&lt;=n &lt;1<br/>whereas randint() generates integer number from given lower<br/>and upper range (both inclusive).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   |
| Q.10 | Write the differences between the following —<br>(a) Copyrights and Patents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3 |
|      | Copyright Patent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   |
|      | Protects the original work<br>done by any creator for both<br>artistic and literary.Proprietary rights are given to an<br>inventor for innovation and<br>invention.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |
|      | Others can't sell, use or<br>perform the same work.Others can't trade or utilize the<br>invention.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |
|      | No registration is required. Registration is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |
|      | Others can't copy or trade on<br>products.Others can't manufacture or make<br>use of the respective product.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |
|      | General time is for 70 years<br>after the death of any creator.General time is for 20 years, but the<br>period may vary from country to<br>country.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |
|      | <ul> <li>(b) Phishing and Hacking</li> <li>Hacking is using exploits to gain access to something you do not normally have access to.</li> <li>Phishing is masquerading as a trustworthy source in an attempt to bait a user to surrender sensitive information such as a username, password, credit card number, etc <ul> <li>(c) Active and Passive footprints</li> </ul> </li> <li>Active footprint data can trail after any activity done intentionally on Internet like data given while filling application form etc.</li> <li>Passive footprint data can trail after any activity done unintentionally on Internet like tracing location information and web history etc.</li> <li>OR</li> </ul> <li>Plagiarism is the unethical and wrongful appropriation of using other's work, thoughts, ideas, or expressions representing as one's own original work. Plagiarism is not in itself a crime, but like other fraud it can be punished.</li> <li>The following points can be followed to avoid plagiarism- <ol> <li>Use your own idea, thought and expression.</li> </ol> </li> |   |

|      | information and credit to its original author must be cited.<br>3. Any quotation/expression quoted by other must be used with<br>name of original author.<br>(Any other relevant points may be considered)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |
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|      | SECTION C- 4 Marks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |
| Q.11 | L=eval(input("Enter a list of numbers : "))<br>print("Entered List : ",L)<br>OL=[]<br>n=len(L)<br>for I in range(n):<br>if L[I]%2==0:<br>OL.append(L[I]/2)<br>else:<br>OL.append(L[I]*2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4 |
|      | print("New List is",OL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |
| Q.12 | <pre>T=eval(input("Enter a tuple of numbers : ")) print("Entered Tuple of numbers is : ",T) n=len(T) sum=0 for I in range(n):     sum=sum+T[I] print("Sum of Tuple is :",sum)</pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4 |
| Q.13 | <ul> <li>(a) E-Waste(Electronic waste) can be defined as discarded electronic devices like computers, electronic appliances and mobile phones etc. which are obsolete or not in use.</li> <li>E-waste may be injurious to human health, if not discarded properly. The proper recycling and disposal of e-waste includes the following-Dismantling: Removal of parts containing dangerous substances (CFCs, switches, PCB) and parts containing valuable substances (cable containing copper, steel, iron, gold, silver etc.) should melted and re used.</li> <li>Segregation: Separate storage and disposal of ferrous metal, non-ferrous metal and plastic etc.</li> <li>Refurbishment and reuse: Refurbishment and reuse of e-waste has potential for those used in electrical and electronic equipment which can be easily refurbished to put to its original use. The working parts of a device can be re-used in other similar devices.</li> </ul> | 2 |

| (b) | Cybercrime is any crime that uses computer and internet are used as tool<br>or victim. Cybercriminals often commit crimes by targeting computer<br>networks or devices.<br>The following safeguards can be followed to prevent cyber-crime.<br>• Always use anti-virus and enable firewall or security mechanism         | 2 |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|     | <ul> <li>Always use and virus and chable in twan or security incentarism<br/>on your PC.</li> <li>Always use strong passwords for different accounts used on<br/>Internet.</li> <li>Customize browser privacy setting to manage history, cookies and<br/>other confidential data.</li> </ul>                             |   |
|     | <ul> <li>Never share your user ID, password and other private data with others.</li> <li>Always know your friends on social media and avoid communication/friendship with unknown user.</li> <li>Take measures to help protect yourself against identity theft. (Any other suitable points may be considered)</li> </ul> |   |