Class XII
INFORMATICS PRACTICES (065)
SAMPLE QUESTION PAPER (2020 - 21)

Max Marks: 70 **Time: 3 hrs**

General Instructions:

1. This question paper contains two parts A and B. Each part is compulsory.
2. Both Part A and Part B have choices.
3. Part-A has 2 sections:
   a. Section – I is short answer questions, to be answered in one word or one line.
   b. Section – II has two case studies questions. Each case study has 4 case-based sub-parts. An examinee is to attempt any 4 out of the 5 subparts.
4. Part - B is Descriptive Paper.
5. Part- B has three sections
   a. Section-I is short answer questions of 2 marks each in which two questions have internal options.
   b. Section-II is long answer questions of 3 marks each in which two questions have internal options.
   c. Section-III is very long answer questions of 5 marks each in which one question has question has internal option.

	Part - A	
	Section - I **Attempt any 15 questions from questions 1 to 21**	
1	State whether True or False : i. A copyright is automatically granted to authors or creators of content. _____ ii. In FOSS source code is usually hidden from the users. _____	1
2	Fill in the blanks : The command used to give a heading to a graph is _____ a. `plt.show()` b. `plt.plot()` c. `plt.xlabel()` d. `plt.title()`	1

3.	Write the output of the following SQL command. `select round(49.88);` a. 49.88 b. 49.8 c. 49.0 d. 50	1
4	Given a Pandas series called Sequences, the command which will display the first 4 rows is _____. a. `print(Sequences.head(4))` b. `print(Sequences.Head(4))` c. `print(Sequences.heads(4)` d. `print(Sequences.Heads(4))`	1
5	Given the following Series S1 and S2: S1 A 10 B 40 C 34 D 60 S2 A 80 B 20 C 74 D 90 Write the command to find the sum of series S1 and S2	1
6	Using Python Matplotlib _____ can be used to count how many values fall into each interval a. line plot b. bar graph c. histogram	1
7	To prevent unauthorized access to and / or from the network, a system known as _____, can be implemented by hardware and / or software.	1
8	In a DataFrame, Axis= 1 represents the_____ elements.	1
9	Which of the following is not a network topology : Star, Mesh , Tree, Bug , Bus	1

10	For web pages where the information is changed frequently, for example, stock prices, weather information which out of the following options would you advise ? a) Static web page b) Dynamic web page Justify your answer.	1
11	The `avg()` function in MySql is an example of _____. a. Math function b. Text function c. Date Function d. Aggregate Function	1
12	The practice of taking someone else's work or ideas and passing them off as one's own is known as _____	1
13	In Pandas the function used to check for null values in a DataFrame is _____	1
14	I can keep you signed in. I can remember your site preferences. I can give you locally relevant content. Who am I ?	1
15	Which amongst the following is not an example of browser ? a. Chrome b. Firefox c. Avast d. Edge	1
16	A mail or message sent to a large number of people indiscriminately without their consent is called_____	1
17	According to a survey, one of the major asian country generates approximately about 2 million tonnes of electronic waste per year. Only 1.5 % of the total e-waste gets recycled. Suggest a method to manage e-waste .	1
18	The _____command can be used to makes changes in the rows of a table in SQL.	1

19	Write the SQL command that will display the current time and date	1
20	_____ network device is known as an intelligent hub .	1
21.	Receiving irreleavnt and unwanted emails repeatedly is an example of _____.	1
	Section -II **Both the case study based questions (22 & 23) are compulsory. Attempt any four sub parts from each question. Each sub question carries 1 mark .**	
22	Consider the following DataFrame **df** and answer any four questions from (i)-(v) rollno name UT1 UT2 UT3 UT4 1 Prerna Singh 24 24 20 22 2 Manish Arora 18 17 19 22 3 Tanish Goel 20 22 18 24 4 Falguni Jain 22 20 24 20 5 Kanika Bhatnagar 15 20 18 22 6 Ramandeep Kaur 20 15 22 24	
(i)	Write down the command that will give the following output. **rollno 6** **name Tanish Goel** **UT1 24** **UT2 24** **UT3 24** **UT4 24** **dtype: object** a. `print(df.max)` b. `print(df.max())` c. `print(df.max(axis=1))` d. `print(df.max, axis=1)`	1
(ii)	The teacher needs to know the marks scored by the student with roll number 4. Help her to identify the correct set of statement/s from the given options : a. `df1=df[df['rollno']==4]` `print(df1)`	1

	b. `df1=df[rollno==4]` `print(df1)` c. `df1=df[df.rollno=4]` `print(df1)` d. `df1=df[df.rollno==4]` `print(df1)`	
(iii)	Which of the following statement/s will give the exact number of values in each column of the dataframe? i. `print(df.count())` ii. `print(df.count(0))` iii. `print(df.count)` iv. `print(df.count(axis='index'))` Choose the correct option: a. both (i) and (ii) b. only (ii) c. (i), (ii) and (iii) d. (i), (ii) and (iv)	1
(iv)	Which of the following command will display the column labels of the DataFrame? a. `print(df.columns())` b. `print(df.column())` c. `print(df.column)` d. `print(df.columns)`	1
(v)	Ms. Sharma, the class teacher wants to add a new column, the scores of Grade with the values, ' A', 'B', 'A', 'A', 'B', 'A' ,to the DataFrame. Help her choose the command to do so: a. `df.column=['A','B','A','A','B','A']` b. `df ['Grade']=['A','B','A','A','B','A']` c. `df.loc['Grade']= ['A','B','A','A','B','A']` d. Both (b) and (c) are correct	1
23	Consider the table STUDENT given below:	

RollNo	Name	Class	DOB	Gender	City	Marks
1	Anand	XI	6/6/97	M	Agra	430
2	Chetan	XII	7/5/94	M	Mumbai	460
3	Geet	XI	6/5/97	F	Agra	470
4	Preeti	XII	8/8/95	F	Mumbai	492
5	Saniyal	XII	8/10/95	M	Delhi	360
6	Maakhiy	XI	12/12/94	F	Dubai	256
7	Neha	X	8/12/95	F	Moscow	324

	8	Nishant	X	12/6/95	M	Moscow	429

(i) State the command that will give the output as : 1

Name
Anand
Chetan
Geet
Preeti

```
i.  select name from student where class='XI' and
class='XII';
ii. select name from student where not class='XI' and
    class='XII';
iii. select name from student where city="Agra" OR
    city="Mumbai";
iv. select name from student where city IN("Agra",
"Mumbai");
```

Choose the correct option:
a. Both (i) and (ii).
b. Both (iii) and (iv).
c. Any of the options (i), (ii) and (iv)
d. Only (iii)

(ii) What will be the output of the following command? 1

```
Select * from student where gender ="F" order by marks;
```

a.

Rollno	Name	Class	DOB	Gender	City	Marks
4	Preeti	XII	8/8/95	F	Mumbai	492
3	Geet	XI	6/5/97	F	Agra	470
7	Neha	X	8/12/95	F	Moscow	324
6	Maakhiy	XI	12/12/94	F	Dubai	256

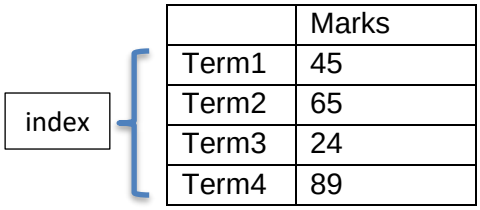
b.

Rollno	Name	Class	DOB	Gender	City	Marks
6	Maakhiy	XI	12/12/94	F	Dubai	256
7	Neha	X	8/12/95	F	Moscow	324
3	Geet	XI	6/5/97	F	Agra	470
4	Preeti	XII	8/8/95	F	Mumbai	492

c.

Gender	Marks
F	256
F	324
F	470
F	492

	d. | Gender	Marks
---	---
F	492
F	470
F	324
F	256		
(iii)	Prachi has given the following command to obtain the highest marks `Select max(marks) from student where group by class;` but she is not getting the desired result. Help her by writing the correct command. a. Select max(marks) from student where group by class; b. Select class, max(marks) from student group by marks; c. Select class, max(marks) group by class from student; d. Select class, max(marks) from student group by class;	1
(iv)	State the command to display the average marks scored by students of each gender who are in class XI? i. Select gender, avg(marks) from student where class= "XI" group by gender; ii Select gender, avg(marks) from student group by gender where class="XI"; iii. Select gender, avg(marks) group by gender from student having class="XI"; iv. Select gender, avg(marks) from student group by gender having class = "XI"; Choose the correct option: a. Both (ii) and (iii) b. Both (ii) and (iv) c. Both (i) and (iii) d. Only (iii)	1
(v)	Help Ritesh to write the command to display the name of the youngest student? a. select name,min(DOB) from student ; b. select name,max(DOB) from student ; c. select name,min(DOB) from student group by name ; d. select name,maximum(DOB) from student;	1

	Part - B	
	Section – I	
24	Consider a given Series , M1:  Write a program in Python Pandas to create the series.	2
25	State any two differences between single row functions and multiple row functions. **OR** What is the difference between the order by and group by clause when used alongwith the **`select`** statement. Explain with an example.	2
26	Consider the decimal number x with value 8459.2654. Write commands in SQL to: i. round it off to a whole number ii. round it to 2 places **before** the decimal.	2
27	Consider the following Series object, S_amt i. Write the command which will display the name of the furniture having rent>250. ii. Write the command to name the series as Furniture.	2
28	Anjali writes the following commands with respect to a table employee having fields, empno, name, department, commission. Command1 : `Select count(*) from employee;`	2

	Marks
Term1	45
Term2	65
Term3	24
Term4	89

Table	350
Chair	200
Sofa	800
Stool	150

<table>
<tr><td></td><td>Command2: <code>Select count(commission) from employee;</code>

She gets the output as 4 for the first command but gets an output 3 for the second command. Explain the output with justification.</td><td></td></tr>
<tr><td>29</td><td>Consider the following SQL string: “Preoccupied”

Write commands to display:

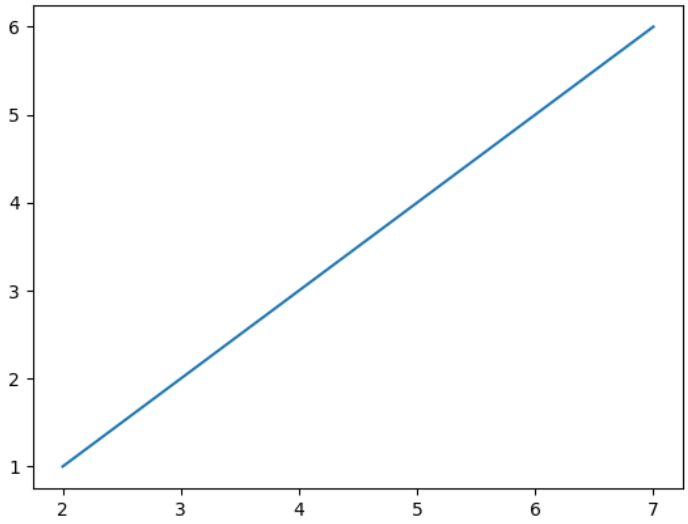
a. “occupied”
b. “cup”

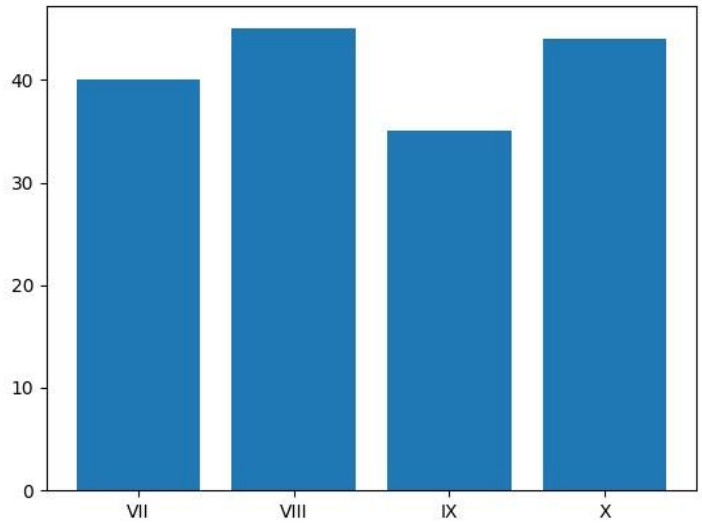
OR

Considering the same string “Preoccupied”
Write SQL commands to display:

a. the position of the substring ‘cup’ in the string “Preoccupied”
b. the first 4 letters of the string</td><td>2</td></tr>
<tr><td>30</td><td>Consider the following DataFrame, classframe

<table><tr><th></th><th>Rollno</th><th>Name</th><th>Class</th><th>Section</th><th>CGPA</th><th>Stream</th></tr><tr><td>St1</td><td>1</td><td>Aman</td><td>IX</td><td>E</td><td>8.7</td><td>Science</td></tr><tr><td>St2</td><td>2</td><td>Preeti</td><td>X</td><td>F</td><td>8.9</td><td>Arts</td></tr><tr><td>St3</td><td>3</td><td>Kartikey</td><td>IX</td><td>D</td><td>9.2</td><td>Science</td></tr><tr><td>St4</td><td>4</td><td>Lakshay</td><td>X</td><td>A</td><td>9.4</td><td>Commerce</td></tr></table>
Write commands to :
i. Add a new column ‘Activity’ to the Dataframe
ii. Add a new row with values (5 , Mridula ,X, F , 9.8, Science)</td><td>2</td></tr>
<tr><td>31</td><td>Expand the following terms related to Computer Networks:
a. SMTP
b. POP
c. FTP
d. VoIP</td><td>2</td></tr>
<tr><td>32</td><td>List any two health hazards related to excessive use of Technology.</td><td>2</td></tr>
</table>

33	Priyanka is using her internet connection to book a flight ticket. This is a classic example of leaving a trail of web activities carried by her. What do we call this type of activity? What is the risk involved by such kind of activity?	2
	Section -II	
34	Cconsider two objects x and y. x is a list whereas y is a Series. Both have values 20, 40,90, 110. What will be the output of the following two statements considering that the above objects have been created already a. `print (x*2)` b. `print(y*2)` Justify your answer.	3
35	What do you mean by Identity theft? Explain with the help of an example. **OR** What do you understand by Net Ettiquetes? Explain any two such ettiquetes.	3
36	Consider the following graph . Write the code to plot it.  **OR** Draw the following bar graph representing the number of students in each class.	3



37 A relation Vehicles is given below : 3

V_no	Type	Company	Price	Qty
AW125	Wagon	Maruti	250000	25
J0083	Jeep	Mahindra	4000000	15
S9090	SUV	Mitsubishi	2500000	18
M0892	Mini van	Datsun	1500000	26
W9760	SUV	Maruti	2500000	18
R2409	Mini van	Mahindra	350000	15

Write SQLcommands to:
a. Display the average price of each type of vehicle having quantity more than 20.
b. Count the type of vehicles manufactured by each company.
c. Display the total price of all the types of vehicles.

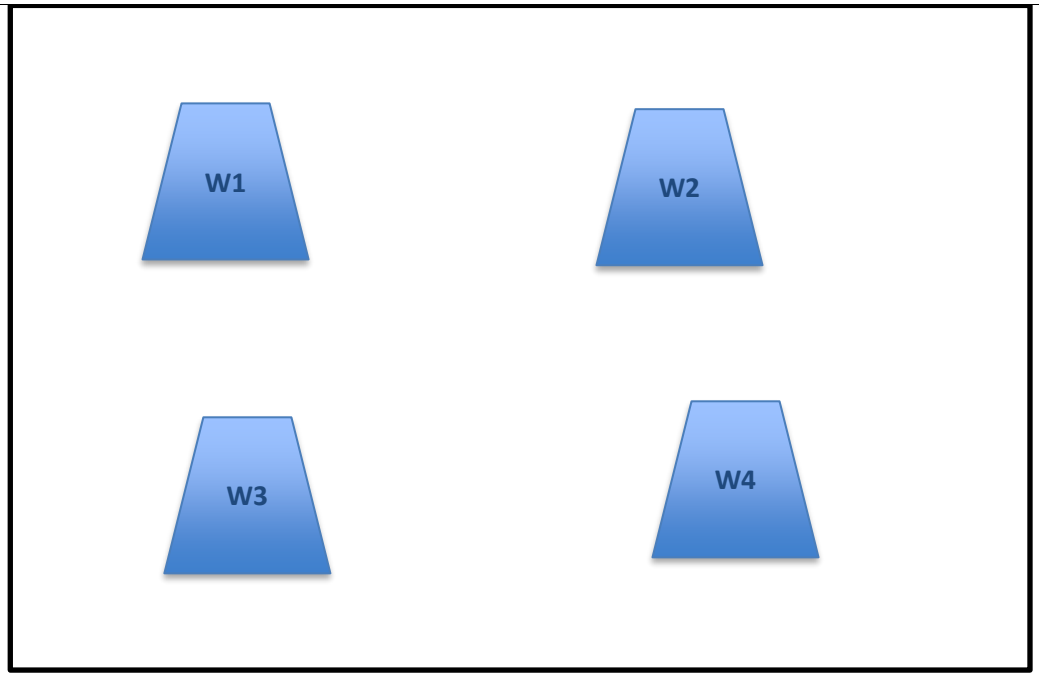
Section -III

38 Write a program in Python Pandas to create the following DataFrame batsman from a Dictionary: 5

B_NO	Name	Score1	Score2
1	Sunil Pillai	90	80
2	Gaurav Sharma	65	45
3	Piyush Goel	70	90
4	Kartik Thakur	80	76

Perform the following operations on the DataFrame :
1)Add both the scores of a batsman and assign to column “Total”
2)Display the highest score in both Score1 and Score2 of the DataFrame.

	3)Display the DataFrame	
39	Write the SQL functions which will perform the following operations: i) To display the name of the month of the current date . ii) To remove spaces from the beginning and end of a string, “ Panorama “. iii) To display the name of the day eg, Friday or Sunday from your date of birth, dob. iv) To display the starting position of your first name(fname) from your whole name (name). v) To compute the remainder of division between two numbers, n1 and n2 **OR** Consider a table SALESMAN with the following data: SNO SNAME SALARY BONUS DATE OF JOIN A01 Beena Mehta 30000 45.23 29-10-2019 A02 K. L. Sahay 50000 25.34 13-03-2018 B03 Nisha Thakkar 30000 35.00 18-03-2017 B04 Leela Yadav 80000 NULL 31-12-2018 C05 Gautam Gola 20000 NULL 23-01-1989 C06 Trapti Garg 70000 12.37 15-06-1987 D07 Neena Sharma 50000 27.89 18-03-1999 Write SQL queries using SQL functions to perform the following operations: a) Display salesman name and bonus after rounding off to zero decimal places. b) Display the position of occurrence of the string “ta” in salesman names. c) Display the four characters from salesman name starting from second character. d) Display the month name for the date of join of salesman e) Display the name of the weekday for the date of join of salesman	5
40.	A company in Mega Enterprises has 4 wings of buildings as shown in the diagram :	5



Center to center distances between various Buildings:
W3 to W1 - 50m
W1 to W2 - 60m
W2 to W4 - 25m
W4 to W3 - 170m
W3 to W2 - 125m
W1 to w4 - 90m
Number of computers in each of the wing:
W1 - 150
W2 - 15
W3 - 15
W4 - 25
Computers in each wing are networked but wings are not networked The company has now decided to connect the wings also.
i. Suggest a most suitable cable layout for the above connections.
ii. Suggest the most appropriate topology of the connection between the wings.
iii. The company wants internet accessibility in all the wings. Suggest a suitable technology .
iv. Suggest the placement of the following devices with justification if the company wants minimized network traffic
a)Repeater
b)Hub / switch
v. The company is planning to link its head office situated in New Delhi with the offices in hilly areas. Suggest a way to connect it economically.

Class XII
INFORMATICS PRACTICES (065)
SAMPLE QUESTION PAPER (2020 - 21)
Marking Scheme

Max. Marks: 70 **Time: 3 hours**

Question No.	Section A	Total
1	**i. True** **ii. False** **½ mark for each correct answer**	1
2	plt.title() **1 mark for correct answer**	1
3.	50 1 mark for the correct answer	1
4	`print(Sequences.head(4))` 1 mark for the correct usage of head()	1
5	`print(S1+S2)` 1 mark for the correct print() statement	1
6	histogram 1 mark for the correct answer	1
7	Firewall 1 mark for the correct answer	1

8	column 1 mark for the correct answer	1
9	Bug 1 mark for the correct answer	1
10	Dynamic web page 1 mark for the correct answer	1
11	Aggregate Function 1 mark for the correct answer	1
12	Plagiarism 1 mark for the correct answer	1
13	isnull() 1 mark for the correct answer	1
14	Cookies 1 mark for the correct answer	1
15	c. Avast 1 mark for the correct answer	1
16	spam 1 mark for the correct answer	1
17	Buy environmentally friendly electronics Donate used electronics to social programs Reuse , refurbish electronics Recycling e-waste Any other correct answer to be considered 1 mark for the correct answer	1

18	update 1 mark for the correct answer	1
19	Select now(); 1 mark for the correct answer	1
20	Switch 1 mark for the correct answer	1
21	Spam or spamming I mark for the correct answer	1
22.(i)	b. print(df.max()) 1 mark for the correct answer	4
(ii)	a. df1=df[df['rollno']==4] print(df1) d. df1=df[df.rollno==4] print(df1) ½ mark for mentioning option(a) ½ mark for mentioning option(d)	
(iii)	a. both (i) and (ii) 1 mark for stating option "a" as correct answer ½ mark for staing option "b" as correct answer	
(iv)	**a.** d. print(df.columns) 1 mark for the correct answer	
(v)	b. df ['Grade']=['A','B','A','A','B','A'] 1 mark for the correct answer	
23 (i)	**b. Both (iii) and (iv**) select name from student where city="Agra" or city="Mumbai"; or	4

	select name from student where city IN("Agra", "Mumbai"); d. Only (iii) iii. select name from student where city="Agra" or city="Mumbai"; 1 mark for stating option b as correct answer ½ mark for stating d as correct answer	
(ii)	b. | Rollno	Name	Class	DOB	Gender	City	Marks
---	---	---	---	---	---	---
6	Maakhiy	XI	12/12/94	F	Dubai	256
7	Neha	X	8/12/95	F	Moscow	324
3	Geet	XI	6/5/97	F	Agra	470
4	Preeti	XII	8/8/95	F	Mumbai	492 | 1 mark for the correct answer	
(iii)	d. Select class, max(marks) from student group by class; 1 mark for the correct answer	
(iv)	b. Both (ii) and (iv) Select gender, average(marks) from student group by gender where class="XI"; or Select gender, average(marks) from student group by gender having class = "XI"; 1 mark for the correct answer	
(v)	b. select name,max(DOB) from student ; 1 mark for the correct answer	

	Section B	

24	`import pandas as pd`
	`m1=pd.Series([45,65,24,89],index=['term1','term2','term3','term4'])`
	
	½ mark for import statement
	½ mark for usage of Series ()
	½ mark for stating index as a list
	½ mark for creating object m1
		2

25	Differences between single row functions and multiple row functions. (i) Single row functions work on one row only whereas multiple row functions group rows (ii) Single row functions return one output per row whereas multiple row functions return only one output for a specified group of rows. **OR** The order by clause is used to show the contents of a table/relation in a sorted manner with respect to the column mentioned after the order by clause. The contents of the column can be arranged in ascending or descending order. The group by clause is used to group rows in a given column and then apply an aggregate function eg max(), min() etc on the entire group. (any other relevant answer) Single row v/s Multiple row functions 1 mark for each valid point Group by v/s Order by 1 mark for correct explanation 1 mark for appropriate example	2

26	i. select round(8459.2654);
	ii.select round(8459.2654,-2);
	
	1 mark each for correct answer of part (i) , (ii)
		2

27	i. print(S_amt[S_amt>250]) ii. S_amt.name= 'Furniture' 1 mark each for correct answer of part (i) , (ii)	2
28	This is because the column commission contains a NULL value and the aggregate functions do not take into account NULL values. Thus Command1 returns the total number of records in the table whereas Command2 returns the total number of non NULL values in the column commission.	2

29	a. select substr("Preoccupied", 4);
	or
	select substring("Preoccupied", 4);
	or
	select mid("Preoccupied",4);
	or
	select right(("Preoccupied"", 8);
	
	b. select substr("Preoccupied" ,6,3);
	or
	select substring("Preoccupied", 6,3);
	or
	select mid(("Preoccupied" ,6,3);
	
	OR
	
	a. select instr 'Preoccupied' , ` 'cup'));
	b. select left 'Preoccupied',4);
	
	1 mark for each correct answer of part (a) , (b)
		2

30	i. classframe['Activity']=['Swimming','Dancing','Cricket', 'Singing'] ii. classframe.loc['St5']=[1,'Mridula', 'X', 'F', 9.8, 'Science']	2

	1 mark for each correct answer	
31	a. SMTP: Simple Mail Transfer Protocol b. POP: Point to Point Protocol c. FTP: File Transfer Protocol d. VoIP: Voice over Internet Protocol ½ marks for each correct full form	2
32	The continuous use of devices like smartphones, computer desktop, laptops, head phones etc cause a lot of health hazards if not addressed. These are: i. Impact on bones and joints: wrong posture or long hours of sitting in an uncomfortable position can cause muscle or bone injury. ii. Impact on hearing: using headphones or earphones for a prolonged time and on high volume can cause hearing problems and in severe cases hearing impairments. iii. Impact on eyes: This is the most common form of health hazard as prolonged hours of screen time can lead to extreme strain in the eyes. iv. Sleep problem: Bright light from computer devices block a hormone called melatonin which helps us sleep. Thus we can experience sleep disorders leading to short sleep cycles. 2 marks for any two correct points	2
33	We call this type of activity as Digital Footprints Risk involved : It includes websites we visit emails we send, and any information we submit online, etc., along with the computer's IP address, location, and other device specific details. Such data could be used for targeted advertisement or could also be misused or exploited. 1 mark for naming the activity 1 mark for mentioning any one risk .	2
34	a. will give the output as: `[20,40,90,110,20,40,90,110]` b. will give the output as	3

	0 40 1 80 2 180 3 220 Justification: In the first statement x represents a list so when a list is multiplied by a number, it is replicated that many number of times. The second y represents a series. When a series is multiplied by a value, then each element of the series is multiplied by that number. 1 mark for output of list multiplication 1 mark for output of Series multiplication 1 mark for the justification	
35	Identity theft is the crime of obtaining the personal or financial information of another person for the sole purpose of assuming that person's name or identity to make transactions or use it to post inappropriate remarks , comments etc. Example: Alex likes to do his homework late at night. He uses the Internet a lot and also sends useful data through email to many of his friends. One Day he forgot to sign out from his email account. In the morning, his twin brother, Flex started using the computer. He used Flex's email account to send inappropriate messages to his contacts Or any other relevant example 1 ½ mark for explaining Identity theft 1 ½ nark for suitable example **OR** Net Ettiquets refers to the proper manners and behaviour we need to exhibit while being online. These include : 1. No copyright violation: we should not use copyrighted materials without the permission of the creator or owner. We should give proper credit to owners/creators of open source content when using them.	3

	2. Avoid cyber bullying: Avoid any insulting, degrading or intimidating online behaviour like repeated posting of rumours, giving threats online, posting the victim's personal information, or comments aimed to publicly ridicule a victim. Or any other relevant answer. 1 marks for deifition of Net Ettiquettes 1 mark eachfor the example with explanation.	

36	`import matplotlib.pyplot as plt`
	`plt.plot([2,7],[1,6])`
	`plt.show()`
	alternative answer
	`import matplotlib.pyplot as plt`
	`a = [1,2,3,4,5,6]`
	`b = [2,3,4,5,6,7]`
	`plt.plot (a,b)`
	1 mark for the import statement
	1 mark for appropriate usage of plot()
	1 mark for show()
	
	OR
	
	`import matplotlib.pyplot as plt`
	`Classes = ['VII','VIII','IX','X']`
	`Students = [40,45,35,44]`
	`plt.bar(classes, students)`
	`plt.show()`
	
	1 mark for the import statement
	1 mark for appropriate usage of pie()
	1 mark for show()
		3

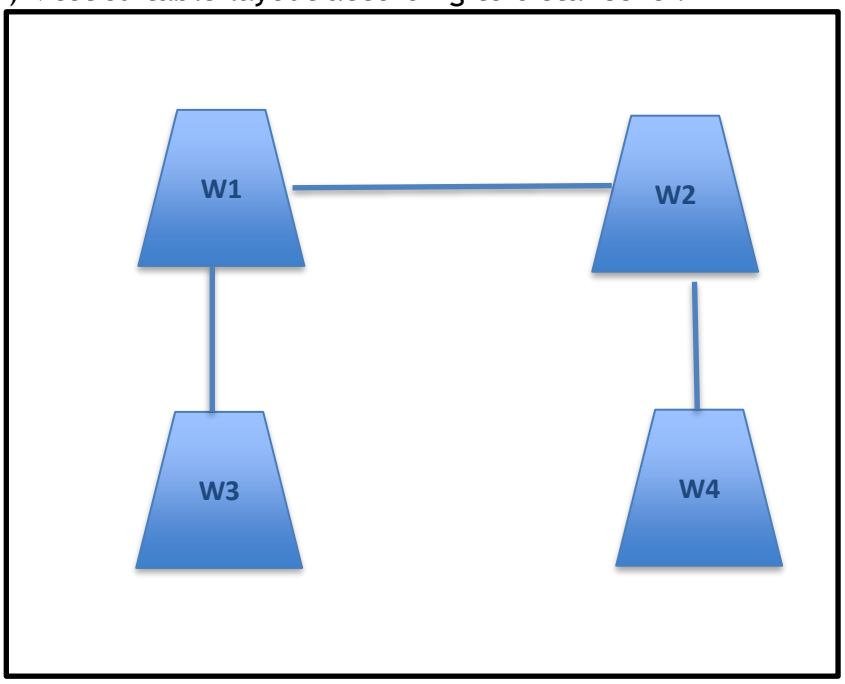
37	a. select Type, avg(Price) from Vehicle group by Type having Qty>20;
	b. select Company, count(distinct Type) from Vehicle group by Company;
	c. Select Type, sum(Price* Qty) from Vehicle group by Type;
		3

	a. ½ mark for the Select with avg(), ½ mark for the having clause b. ½ mark for the Select with count() , ½ mark for group by clause c. ½ mark for the Select with sum() , ½ mark for the group by clause	

38	`import pandas as pd`
	`d1={'B_NO':[1,2,3,4],`
	`'Name':["Sunil Pillai","Gaurav Sharma","Piyush Goel","Kartik Thakur"],'Score1':[90,65,70,80],`
	`'Score2':[80,45,95,76]`
	`}`
	`df=pd.DataFrame(d1)`
	`print(df)`
	`df['Total'] = df['Score1']+ df['Score2']`
	Alternative Answer
	Scheme
	`df['Total'] = sum(df['Score1'], df['Score2'])`
	`print(df)`
	`print("Maximum scores are : " , max(df['Score1']), max(df['Score2']))`
	1 mark for import statement
	2 marks for creating the dataframe
	1 mark for creating column Total to hold the sum of scores
	1 mark for displaying highest scores in Score1 & Score2
		5

39	i) monthname(date(now())) ii) trim(" Panaroma ") iii) dayname(date(dob)) iv)instr(name, fname) v) mod(n1,n2) 1 mark for each correct answer **OR** i) Select sname, round(bonus,0) from Salesman;	5

	ii) Select instr(Sname, "ta") from Salesman;
	iii) Select mid(Sname,2,4) from Salesman;
	alternative answer
	iii) Select Substring(Sname,2,4) from Salesman;
	iv) Select monthname(DateofJoin) from Salesman;
	v) Select dayname(DateofJoin) from Salesman;
	
	1/2 mark each for correct usage of Select and round()
	1/2 mark each for correct usage of Select and instr()
	1/2 mark each for correct usage of Select and substr()
	1/2 mark each for correct usage of Select and monthname()
	1/2 mark each for correct usage of Select and dayname()
	
	Note : Instead of substr() , substring() may be accepted as correct	

40.	i) Most suitable layout according to distance is :  1 mark for an appropriate cable layout ii) Star Topology 1 mark for correct topology iii) Broadband. 1 mark for suggesting suitable technology	5

	iv). a. Not required. Repeaters may be skipped as per above layout (because distance is less than 100 m) b. In every wing ½ mark for placement of repeater ½ mark for placement of hub / switch iv) Radio Waves 1 mark for the appropriate connectivity mode between HQ and other offices	