

# BUDHA DAL PUBLIC SCHOOL, PATIALA

SECOND TERM EXAMINATION (4 December 2023)

CLASS XII SUBJECT INFORMATICS PRACTICES (065)

TIME:03 HOURS

M.M:70

## General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section A has 18 questions carrying 01 mark each.
4. Section B has 07 Very Short Answer type questions carrying 02 marks each.
5. Section C has 05 Short Answer type questions carrying 03 marks each.
6. Section D has 02 questions carrying 04 marks each.
7. Section E has 03 questions carrying 05 marks each.

SECTION A		
1.	<b>Choose the Correct Option</b> A two- dimensional labeled array that is an ordered collection of columns to store heterogeneous data type is : (a) Series(c) NumPY array (b) Dataframe(d) Panel	1
2.	<b>CSV Stands for:</b> (a) Comma Separated Value (c) Comma Separated Variables (b) Column Separated Values (d) Column Separated Variables	1
3.	Which of the following methods should be employed in the code to display a plot()? (a) Show (b) display ( ) (c) Execute ( ) (d) plot( )	1
4.	Which of the following plots makes it easy to visualize a trend in data over intervals of time. (a) Box Plot (b) Histogram (c) Line Chart (d) Bar Chart	1
5.	The term 'Intellectual Property Rights ' Covers. (a) Copyrights (c ) Trademarks (b) Patents (d) All of these	1
6.	Unsolicited commercial email is known as _____. (a) Spam (b) Malware (c) Virus (d) Spyware	1
7.	Which of the following is not a type of a cybercrime? (a) Data theft (c) Forgery (b) Damage to data (d) Installing antivirus for protection	1
8.	Online Personal account, personal websites are examples of: (a) Digital Wallet (c) Digital Property (b) Digital Certificate (d) Digital Signature	1
9.	<b>Fill in the Blank</b> A _____ is a Pandas data structure that represents a one-dimensional array-like object of indexed data.	1

10.	Missing data in Pandas series and dataframes can be filled with a _____ value.										
11.	_____ is the text that appears on the top of the plot and defines what the chart is about.										
12.	Barh( ) function is used to create _____ bar chart.										
13.	To change the orientation of the histogram , we can use _____ argument with hist( ).										
14.	The area on which actual plot will appear is defined by _____.										
15.	Software which usually limit the functionality after a trial period are known as _____.										
16.	IT Amendment Act, 2008 came into force from the year _____.										
	<p><b>Q17and18areASSERTIONANDREASONINGbasedquestions.Markthecorrect choiceas</b></p> <p>a) BothAandR aretrueand Risthe correct explanation for A</p> <p>b) Both A and R are true and R is not the correct explanation for A</p> <p>c) A is True but R is False.</p> <p>d) A is False but R is True.</p>										
17.	<p><b>Assertion (A):-</b>Someone has created a fake social media profile in the name of Saket. Saket is a victim of cyberstalking.</p> <p><b>Reasoning (R):</b>Cyberstalking is a form of cybercrime.</p>										
18.	<p><b>Assertion (A):-</b> An internet troll is a person who deliberately sows discord on the internet by starting quarrels or upsetting people.</p> <p><b>Reasoning (R):</b> - We can download a use any material available on the internet.</p>										
	<b>SECTION B</b>										
19.	How can we check if a dataframe df has any missing values?										
20.	Write a python code to create an empty dataframe.										
21.	What are the advantages of CSV file formats?										
22.	What is Matplotlib?										
23.	What are the various types of plot offered by Matplotlib?										
24.	Write any two net etiquettes related to use of Internet Technology.										
25.	What is cyber trolling?										
	<b>SECTION C</b>										
26.	<p>Write Python code to create the Series EMP with the following data (Using Dictionary).</p> <table border="1" style="margin-left: 20px;"> <tr> <td>Code</td> <td></td> </tr> <tr> <td>E1</td> <td>SANYA</td> </tr> <tr> <td>E2</td> <td>KRISH</td> </tr> <tr> <td>E3</td> <td>RISHAV</td> </tr> <tr> <td>E4</td> <td>DEEPAK</td> </tr> </table>	Code		E1	SANYA	E2	KRISH	E3	RISHAV	E4	DEEPAK
Code											
E1	SANYA										
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E3	RISHAV										
E4	DEEPAK										



27. **What will be the output of the following code:**  
 Import pandas as pd  
 S1=pd.Series([1,2,2,7,'Sachin',77.5])  
 print(S1.head())  
 print(S1.head(3))
28. What is data visualization? What is its significance?
29. Describe measures to recycle your e-waste safely.
30. How is digital piracy related to illegal download?

**SECTION D**

31. Write a pandas program to get last 3 records of ad dataframe.

Original Data Frame

	Col 1	Col 2	Col 3
0	1	4	7
1	2	5	5
2	3	6	8
3	4	9	12
4	7	5	1
5	11	0	11

Last 3 rows of the said DataFrame:

	Col 1	Col 2	Col 3
3	4	9	12
4	7	5	1
5	11	0	11

32. Explain any four health hazards related to excessive use of technology.

**SECTION-E**

33. Write a program to plot list elements between X-axis and Y-axis

34.

Create two dataframes using the following two dictionaries. Merge the two dataframes and append the second dataframe as a new column to the first dataframe on the basis of manufacturing company's name.

```
Car_Prince={'Company':['Toyota','Honda','BMW','Audi'],  
           'Price':[23845,17995,135925,71400]}
```

```
Car_Horsepower={'Company':['Toyota','Honda','BMW','Audi'],  
               'horsepower':[141,80,182,160]}
```

Expected Output:

	Company	Price	Horsepower
0	Toyota	23845	141
1	Honda	17995	80
2	BMW	135925	182
3	Audi	71400	160

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35.

What do you mean by phishing? Explain with the help of an example.

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