

PRE BOARD I EXAMINATION (2023-24)

MARKING SCHEME

CLASS: XII

Subject: INFORMATICS PRACTICES (065)

M.M: 70

DURATION: 3 hrs

General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section A have 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 03 Long Answer type questions carrying 05 marks each.
7. Section E has 02 questions carrying 04 marks each. One internal choice is given in Q35 against part c only.
8. All programming questions are to be answered using Python Language only.

S.N O	Question	Marks
SECTION A		
1	a. Computer lab network	1
2	(d) <DF> = pandas.read_csv(<files>)	1
3	(b) header = None	1
4	c. 6375	1
5	OSS stands for- b. Open Source Software	1
6	i. SELECT min(AMOUNT) FROM ORDERS;	1
7	c. Sum()	1
8	d. DISTINCT	1
9	c. Day()	1
10	b. DataFrame()	1
11	ii. iteritems()	1
12	d. any of the above	1
13	a. size	1
14	c. Norton antivirus	1

15	d. tail(3)	1
16	i print(ser[:6])	1
<p>Q17 and 18 are ASSERTION AND REASONING-based questions. Mark the correct choice as</p> <p>a. Both A and R are true and R is the 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	c	1
18	d	1
SECTION B		
19	<p>A web browser is a software program that shows a web page. It normally connects to the internet to access the document. A web server is a computer or software that provides services to other applications known as clients. The web browser requests online pages and services from the server.</p> <p style="text-align: center;">OR</p> <p>File Sharing. Hardware Sharing. Application Sharing. Internet Access. Centralized Software Management. Data Security and Management.</p>	2
20	SELECT DISTINCT STREAM FROM STUDENT;	2
21	WHERE is used to filter records before any groupings take place that is on single rows. GROUP BY aggregates/ groups the rows and returns the summary for each group. HAVING is used to filter values after they have been groups	2
22	<pre>import pandas as pd D={'Beas':18,'Chenab':2,'Ravi':20,'satluj':18} pd.Series(d)</pre>	2
23	a) 100	2
24	<p>False False True False</p>	2
25	Consider the following code and the output of the code- 15	2

3,5

SECTION C**26**

Consider the following table player and give the output of commands that follow- **3**

PLAYER

PID	PNAME	GENDER	GAME	RANK
P01	JASPRIT	M	CRICKET	5
P02	SAYNA	F	BADMINTON	9
P03	SANIYA	F	TENNIS	15
P04	VIRAT	M	CRICKET	1
P05	LAKSHYA	M	BADMINTON	51

I) LENGTH(PNAME)

5
5
6
7
7

II JASPRIT
VIRAT

II) 0
0

27

```
import pandas as pd
d={'name':['william','ema','sophiya'],'region':['east','north','east'],'sales':[5000,5200,4000],'expense':[4000,3000,2000]}
df=pd.DataFrame(d)
print(df)
```

name	region	sales	expense
William	East	50000	42000
Emma	North	52000	43000
Sofia	East	90000	50000
Markus	South	34000	44000
Edward	West	42000	38000

3

28	Consider the dataframe as given in Q 27, Write commands to- i) <code>df.drop('sales',axis=1,inplace=True)</code> ii) <code>print(df.loc[2,['region','expense']])</code> iii) <code>df.to_csv("c:\\sales.csv")</code>	3																																			
29	Consider the string "Class 12 CS". Write command to display: a) <code>Select instr('class 12 CS','CS')</code> (b) <code>select right('class 12 CS',6)</code> (c) <code>Select length(trim('class 12 CS'))</code>	1+1+2																																			
30	Based on table VEHICLE given here, write suitable SQL queries for the following: <table border="1" data-bbox="320 611 1002 896"> <thead> <tr> <th>Vno</th> <th>Type</th> <th>Company</th> <th>Price</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>AW125</td> <td>Wagon</td> <td>Maruti</td> <td>250000</td> <td>25</td> </tr> <tr> <td>J0083</td> <td>Jeep</td> <td>Mahindra</td> <td>4000000</td> <td>15</td> </tr> <tr> <td>S9090</td> <td>SUV</td> <td>Mitsubishi</td> <td>2500000</td> <td>18</td> </tr> <tr> <td>M0892</td> <td>Mini van</td> <td>Datsun</td> <td>1500000</td> <td>26</td> </tr> <tr> <td>W9760</td> <td>SUV</td> <td>Maruti</td> <td>2500000</td> <td>18</td> </tr> <tr> <td>R2409</td> <td>Mini van</td> <td>Mahindra</td> <td>350000</td> <td>15</td> </tr> </tbody> </table> <p>Write SQL Commands to :</p> a) <code>Select avg(price), type from vehicle group by type having avg(price)>20000</code> (b) <code>select count(type) from vehicle where company in('maruti','mahindra')</code> (c) <code>select sum(price) from Vehicle</code> <p style="text-align: center;">OR</p> Explain pattern matching and LIKE OPERATOR with an example	Vno	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	3
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SECTION D																																					
31	Write suitable SQL query for the following: i) <code>select left(' INDIA SHINING',7)</code> ii) <code>Select instr('PREBOARD 2023', 'BOARD')</code> iii. <code>Select truncate(23.78,1)</code> iv. <code>select pow(9,5)</code> v. <code>select dayofyear('2022-11-12')</code> <p style="text-align: center;">OR</p> . i. <code>substring()</code> extracts substring from main string ii. <code>length()</code> <code>select length('hello')</code> 5 iii. <code>Monthname()</code> <code>select monthname(now())</code> September iv. <code>DAYNAME()</code> <code>select dayname(now())</code> Monday v. <code>ROUND()</code> <code>select round(11.57,1)</code> 11.6	5																																			
32	Based on the above specifications, answer the following questions: a bus/star b. dial up connection with modem . c. Switch d. Radiowaves e. B2	5																																			
33	Consider the given DataFrame 'Stock':																																				

	<p>Name Price</p> <p>0 Nancy Drew 150</p> <p>1 Hardy boys 180</p> <p>2 Diary of a wimpy kid 225</p> <p>3 Harry Potter 500</p> <p>i) Stock.rename(columns={'price':'cost'})</p> <p>ii) Stock[special_price]=[150,180,225,500]</p> <p>iii) stock.loc[4]=['the secret',800]</p> <p>iv) stock.drop('special_price',axis=1, inplace=True)</p> <p>v) Predict the output of the following python statement: (original dataframe)</p> <p>a) 8</p> <p>b) 2 Diary of a wimpy kid 225</p> <p> 3 Harry Potter 500</p>	5
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SECTION E

34	<p>i) Select lower(cname) from cloth;</p> <p>ii) Select min(price) from cloth;</p> <p>iii) Select count(ccode) from cloth where size='M';</p>	3
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35	<table border="1"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>acct</td> <td>99</td> <td>94.0</td> <td>92</td> <td>97.0</td> </tr> <tr> <td>eco</td> <td>90</td> <td>94.0</td> <td>92</td> <td>97.0</td> </tr> <tr> <td>eng</td> <td>95</td> <td>89.0</td> <td>91</td> <td>89.0</td> </tr> <tr> <td>ip</td> <td>94</td> <td>NaN</td> <td>99</td> <td>95.0</td> </tr> <tr> <td>math</td> <td>97</td> <td>100.0</td> <td>99</td> <td>NaN</td> </tr> </tbody> </table> <p>i. 2</p> <p>ii. Transpose</p> <p>Df.loc['eng':'ip','B']</p> <p>OR (Option for part B only)</p> <p>Df.set_index('A', inplace=True)</p>		A	B	C	D	acct	99	94.0	92	97.0	eco	90	94.0	92	97.0	eng	95	89.0	91	89.0	ip	94	NaN	99	95.0	math	97	100.0	99	NaN	1+1+2
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