

PREBOARD-I

CLASS - XII

INFORMATICS PRACTICES(065)

MARKING SCHEME

| Q.NO | ANSWER | Marks |
|------|--|-------|
| | SECTION-A (1 MARKS) | |
| 1 | a. LAN 1 mark for correct answer | 1 |
| 2 | c. digital property 1 mark for correct answer | 1 |
| 3 | a Copyright 1 mark for correct answer | 1 |
| 4 | c 3 1 mark for correct answer | 1 |
| 5 | c. 190 1 mark for correct answer | 1 |
| 6 | d. Pharming 1 mark for correct answer | 1 |
| 7 | c option (i) & (iv) 1 mark for correct answer | 1 |
| 8 | a. Text function 1 mark for correct answer | 1 |
| 9 | c 61 1 mark for correct answer | 1 |
| 10 | c. print (p_series.tail(4)) 1 mark for correct answer | 1 |
| 11 | d. plt.title() 1 mark for the correct answer | 1 |
| 12 | D shape 1 mark for correct answer | 1 |
| 13 | d. repeater | 1 |

| | | |
|---------------------|--|---|
| 14 | d. Now() 1 mark for correct answer | 1 |
| 15 | c Plagiarism 1 mark for correct answer | 1 |
| 16 | d. Phishing 1 mark for correct answer | 1 |
| 17 | a. Both A and R are true and R is the correct explanation for A 1 mark for correct answer | 1 |
| 18 | c A is True but R is False 1 mark for correct answer | 1 |
| SECTION-B (2 MARKS) | | |
| 19 | <p>(i) Cyber bullying: It is the act of intimidating, threatening, or coercing people online through the use of social media, email, text messages, blog posts, or other digital or electronic methods.</p> <p>(ii) Cyber Stalking: It is the act of using the internet to consistently threaten somebody. This crime is often perpetrated through email, social media, and the other online medium.</p> <p style="text-align: center;">OR</p> <p>a. SMTP: Simple Mail Transfer Protocol</p> <p>b. POP: Point to Point Protocol</p> <p>c. FTP: File Transfer Protocol</p> <p>d. VoIP: Voice over Internet Protocol</p> <p>½ marks for each correct full form</p> | 2 |
| 20 | The problem with the given SQL query is that group by clause is missing in the query. Corrected Query: SELECT DEPT, MAX(SALARY) FROM EMPLOYEE GROUP BY DEPT; | 2 |
| 21 | 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 e.g. max(), min() etc. on the entire group. (any other relevant answer) | 2 |
| 22. | St={'Science' :27, 'arts' :38 , 'commerce':42} S1=pd.Series(St) 1 mark for each correct python statement | 2 |
| 23. | The e-waste management- i. Saves the environment and natural resources | 2 |

| | | |
|--|---|--|
| | ii. Allows for recovery of precious metals iii. Protects public health and water quality iv. Saves landfill space ½ mark for each benefit <p style="text-align: center;">OR</p> Intellectual property rights are the rights given to persons over the creations of their minds like creativity concepts, inventions, industrial models, trademarks, songs, literature, symbols, names, brands,...etc. They also entitle him/her to prevent others from using, dealing or tampering with his/her product without prior permission from him/her. It should be protected since: <ol style="list-style-type: none"> 1. New innovations in all IPR domains lead to Human progress and advancement. 2. Legal protection of new innovations encourages safe spending on other innovations. 3. Caring for and protecting IPR contribute to achieving economic and social development. | |
|--|---|--|

| | | |
|----|---|---|
| 24 | a. [10,20,10,20] – Replication b. [20,40] - Multiplication | 2 |
|----|---|---|

| | | |
|----|---|---|
| 25 | i. Shape of Dataframe is (4,3) ii. Name of index are: 0,1,2,3 and column names are: ID, Name, Marks 1 mark for each correct statement | 2 |
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SECTION-C (3 MARKS)

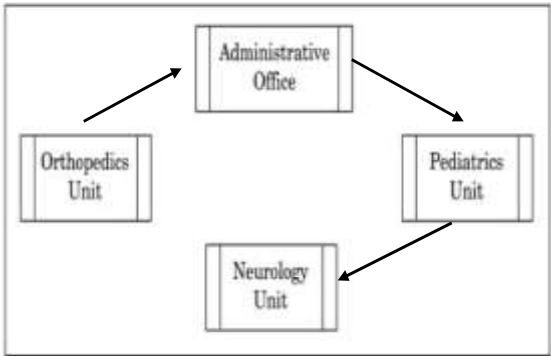
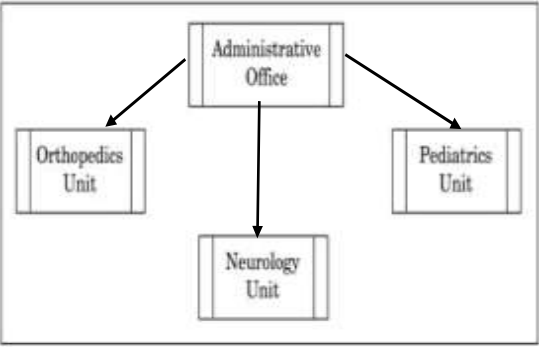
| 26 | (a) <table border="1" style="margin-left: 40px;"> <tr><td>Avg(exp)</td></tr> <tr><td>9</td></tr> </table> (b) <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>Id</th> <th>Name</th> <th>Doj</th> <th>Dept</th> <th>Gender</th> <th>Exp</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>Danish</td> <td>11-09-2013</td> <td>Personnel</td> <td>M</td> <td>8</td> </tr> </tbody> </table> (c) <table border="1" style="margin-left: 40px;"> <tr><td>Name</td></tr> <tr><td>AMAN</td></tr> <tr><td>CHRISTINA</td></tr> <tr><td>SHEM</td></tr> </table> (1 mark for each correct output) | Avg(exp) | 9 | Id | Name | Doj | Dept | Gender | Exp | 6 | Danish | 11-09-2013 | Personnel | M | 8 | Name | AMAN | CHRISTINA | SHEM | 3 |
|-----------------|---|-----------------|-----------|--------|------|-----|------|--------|-----|---|--------|------------|-----------|---|---|-------------|------|-----------|------|---|
| Avg(exp) | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | |
| Id | Name | Doj | Dept | Gender | Exp | | | | | | | | | | | | | | | |
| 6 | Danish | 11-09-2013 | Personnel | M | 8 | | | | | | | | | | | | | | | |
| Name | | | | | | | | | | | | | | | | | | | | |
| AMAN | | | | | | | | | | | | | | | | | | | | |
| CHRISTINA | | | | | | | | | | | | | | | | | | | | |
| SHEM | | | | | | | | | | | | | | | | | | | | |

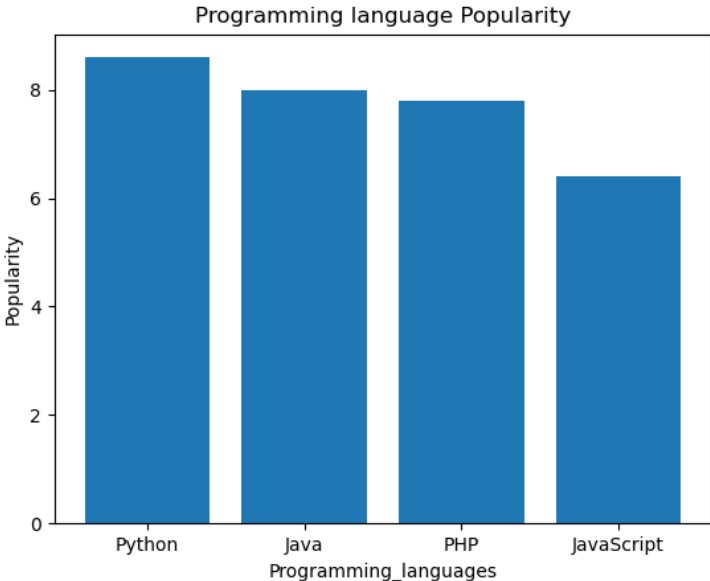
| | | |
|----|--|--------------------------------------|
| 27 | import pandas as pd D={'Arnab':[90,91,97],'Ramit':[92,81,96],'Samridhi':[89,91,88] } Df=pd.DataFrame(D,index=['Maths','Science','Hindi']) print(Df) | ½ mark 1 mark 1 mark ½ mark |
|----|--|--------------------------------------|

| | | | | | | | | | | | |
|----|--|------|---------|-----|----|-------|------|----|-------|------|---|
| 28 | <table style="margin-left: 40px;"> <tr> <td>a.</td> <td>Column3</td> <td>Res</td> </tr> <tr> <td>T1</td> <td>60.00</td> <td>True</td> </tr> <tr> <td>T2</td> <td>59.22</td> <td>True</td> </tr> </table> | a. | Column3 | Res | T1 | 60.00 | True | T2 | 59.22 | True | 3 |
| a. | Column3 | Res | | | | | | | | | |
| T1 | 60.00 | True | | | | | | | | | |
| T2 | 59.22 | True | | | | | | | | | |

| | | | | |
|---------------------------------|----|-----------|---------|---------|
| | T3 | 46.04 | False | |
| | T4 | 58.62 | False | |
| b. | | Column1 | Column2 | Column3 |
| | T3 | 49.090140 | 100.0 | 46.04 |
| | T4 | 38.487265 | 85.4 | 58.62 |
| c. | | Column3 | | |
| | T2 | 59.22 | | |
| | T3 | 46.04 | | |
| 1 mark for each correct output. | | | | |

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| 29 | <p>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.</p> <p>Example:</p> <p>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</p> <p>Or any other relevant example</p> <p>1 ½ mark for explaining Identity theft</p> <p>1 ½ mark for suitable example</p> <p style="text-align: center;">OR</p> <p>Net Etiquettes refers to the proper manners and behavior we need to exhibit while being online. These include :</p> <ol style="list-style-type: none"> 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. 2. Avoid cyber bullying: Avoid any insulting, degrading or intimidating online behavior 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. <p>1 ½ marks for definitions of Net Etiquettes</p> | 3 |
|----|--|---|

| | | |
|--------------------|---|---|
| | 1 ½ mark each for the example with explanation | |
| 30 | <p>a) Select substr(description,1,3) from cloth;</p> <p>b) select fabric , count(*) from cloth group by fabric;</p> <p>c) select fabric , avg(price) from cloth group by fabric;</p> <p>OR</p> <p>GROUP BY clause is used in a SELECT statement in combination with aggregate functions to group the result based on distinct values in a column. For example: To display total number of formal shirt and frock Description from the table CLOTH, we need to first group records based on the description then we should count records with the help of count() function. 1 Mark for each correct answer</p> | 3 |
| SECTION-D(5 MARKS) | | |
| 31 | <p>i. select substr("Computer Lab", 3, 4);</p> <p>ii. Select round(2.372,1);</p> <p>iii. Select dayname(now());</p> <p>iv. Select trim(" Python is Dangerous ");</p> <p>v. Select mod(37,10);</p> <p>OR</p> <p>i. Return the string after removing leading spaces from the string.</p> <p>ii. Return the string in Capital letters</p> <p>iii. Return the value after calculating m to the power n</p> <p>iv. Return the rightmost number of characters as specified</p> <p>v. Return the number of the month like 3 for 'march'</p> <p>1 Mark for each correct answer</p> | 5 |
| 32 | <p>a) <i>Administrative Office</i></p> <p>b)</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>c) <i>Switch</i></p> <p>d) <i>STAR and Ethernet Cable</i></p> <p>e) <i>LAN</i></p> | 5 |

| | | |
|-----------|--|--------------|
| <p>33</p> | <pre> import matplotlib.pyplot as plt sub=['ENGLISH','ACCOUNTS','BST','ECONOMICS','IP'] per=[85,98,70,82,100] plt.bar(sub,per,color='green', align='center') #1 mark plt.xlabel("SUBJECT") plt.ylabel("PERCENTAGE") plt.title("SUBJECTWISE RESULT ANALYSIS") plt.show() plt.savefig('Result.png') OR import matplotlib.pyplot as plt import numpy as np programming_languages=['Python', 'Java', 'PHP', 'JavaScript'] popularity=[8.6, 8, 7.8, 6.4] plt.bar(programming_languages,popularity) plt.xlabel('Programming_languages', fontsize=10) plt.ylabel('Popularity', fontsize=10) plt.title('Programming language Popularity') plt.show() </pre>  <p style="text-align: center;"><i>Correct program 5 marks</i></p> | <p>5</p> |
| <p>34</p> | <p>i. Select color, count(*) from cloths where color ='green'; ii. Select cname, dayname(dob) from cloth; iii. Select sum(Price),size from cloth Group by size ;</p> <p style="text-align: center;">OR</p> <p>Select cname from cloth where month(dop) = 11 and price < 1200</p> | <p>1+1+2</p> |

35

A. (a)

| | Days | No_of_classes |
|---|----------|---------------|
| 3 | Thursday | 2 |
| 4 | Friday | 4 |
| 5 | Saturday | 0 |

(b)

```
Index(['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday'], dtype='object')
```

B. `print(df.loc['Tuesday': 'Thursday', 'No_of_classes'])`

OR

```
print("Total Attendance in a day:")  
print(df['Atten'] * df['No_of_classes'])
```

1+1+2

***** End of Marking Scheme *****