INFORMATICS PRACTICES – Code No. 065
MARKING SCHEME
Class - XII - (2025-26)

Time Allowed: 3 Hrs. **Maximum Marks: 70**

Q No.	Section-A	Marks
1	True *(1 mark for correct answer)*	1
2	(B) 5 *(1 mark for correct answer)*	1
3	(D) Phishing *(1 mark for correct answer)*	1
4	(A) df.to_csv() *(1 mark for correct answer)*	1
5	(A) Modem *(1 mark for correct answer)*	1
6	(A) Rounds the number to the nearest integer *(1 mark for correct answer)*	1
7	(B) Copyright *(1 mark for correct answer)*	1
8	(D) Consecutive integers starting from 0 *(1 mark for correct answer)*	1
9	(D) 4 *(1 mark for correct answer)*	1
10	(C) Internet Telephony *(1 mark for correct answer)*	1
11	(B) COUNT(column_name) *(1 mark for correct answer)*	1
12	(C) The result has all indices, with missing values filled as NaN *(1 mark for correct answer)*	1
13	(C) Information Technology Act, 2000 *(1 mark for correct answer)*	1
14	(A) ORDER BY *(1 mark for correct answer)*	1
15	(B) df.loc[:2] *(1 mark for correct answer)*	1

16	(C) Mesh *(1 mark for correct answer)*		1
17	(C) To find the position of a substring in a string *(1 mark for correct answer)*		1
18	(B) pd.DataFrame() *(1 mark for correct answer)*		1
19	(C) UPPER() *(1 mark for correct answer)*		1
20	(A) Both A and R are True, and R correctly explains A. *(1 mark for correct answer)*		1
21	(A) Both A and R are True, and R correctly explains A. *(1 mark for correct answer)*		1
Q No.	**Section-B**		**Marks**
22	(A)	A DataFrame is a 2-Dimensional labeled data structure with rows and columns. Property: Flexible Size - Rows and Columns can be added or deleted after creation of DataFrame. *(1 mark for correct definition)* *(1 mark for correct Property)* **OR**	2
	(B)	A Series is 1-dimensional, while a DataFrame is 2-dimensional. Series is size immutable while DataFrame is size mutable. *(1 mark for each correct difference)*	
23	E-waste refers to discarded electronic devices like computers and phones. Impact: E-waste releases toxic chemicals into the soil and water, harming the environment. *(1 mark for correct definition)* *(1 mark for correct impact)*		2
24	pandas {'January': 31, 'February': 28, 'March': 31} Series *(1/2 mark for pandas)* *(1 mark for dictionary)* *(1/2 mark for Series)*		2

25	(A)	Web Server : It is a computer software that accepts client request and responds with required content or error message. Web Hosting: It is a service that stores and maintains a website's files on a server so that the website is accessible online. *(1 mark for role of Web Sever)* *(1 mark for role of Web Hosting)* **OR**	2
	(B)	VoIP allows voice communication over the internet. Benefit: Cost-effective *(1 mark for correct definition)* *(1 mark for correct benefit)*	
26	I. SELECT DAYNAME('2026-01-01'); II. SELECT INSTR('Incredible India', 'India'); *(1 mark for each correct query)*		2
27	Digital footprints are traces of a person's online activity. Active Digital Footprint: Intentional posts or uploads. Passive Digital Footprint: Unintentional data collected (e.g., location tracking). *(1 mark for correct definition)* *(1 mark for correct difference)*		2
28	(A)	StuName Score 0 Abhay 85 1 Ananya 92 2 Javed 88 *(2 marks for correct output)* **OR**	2
	(B)	State Capital 0 Maharashtra Mumbai 2 Kerala Thiruvananthapuram *(2 marks for correct output)*	
Q No	**Section-C**		**Marks**
29	I. Intellectual Property (IP) refers to creations of the mind like literary works, inventions etc. Intellectual Property Rights (IPR) are legal rights granted to creators for their original work. II. Rahul's invention will be covered under Patent.		3

	III. Intellectual Property Rights (IPR) protect innovations by granting creators exclusive control over their inventions, preventing unauthorized use and ensuring financial rewards, which encourages further creativity and economic growth. *(1 mark for each correct answer)*		
30	(A)	import pandas as pd import numpy as np marks = np.array([85, 90, 78, 88]) series = pd.Series(marks, index=['Mathematics', 'Science', 'English', 'History']) print(series) *(1 mark for correct import statement)* *(1 mark for correct creation of ndarray)* *(1 mark for correct creation of series)*	3
		OR	
	(B)	import pandas as pd d1 = {'Course': 'Data Science', 'Duration': 12} d2 = {'Course': 'Artificial Intelligence', 'Duration': 18} d3 = {'Course': 'Web Development', 'Duration': 6} data = [d1, d2, d3] df = pd.DataFrame(data) print(df) *(1 mark for correct import statement)* *(1 mark for correct list of dictionaries)* *(1 mark for correct creation of dataframe)*	
31	I. CREATE TABLE EMPLOYEES (EmployeeID NUMERIC PRIMARY KEY, EmpName VARCHAR(25), HireDate DATE, Salary_in_Lacs FLOAT(4,2)); *(2 mark for correct creation of Table)* *II.* INSERT INTO EMPLOYEES (EmployeeID, EmpName, HireDate, Salary_in_Lacs) VALUES (101, 'Ravi Kumar', '2015-06-01', 1.70);		3

(1 Mark for correct insert Query)

32 (A)

I. SELECT Name FROM STUDENT WHERE Class = 12 ORDER BY Name ASC;

II. SELECT UPPER(Subject) FROM MARKS WHERE Score > 80;

III. SELECT Name, Subject, Score
FROM STUDENT JOIN MARKS
ON STUDENT.StudentID = MARKS.StudentID;

(1 mark for each correct query)

OR

(B)

I. EmployeeID can be considered as Primary Key because it uniquely identifies each employee in the table.

II. ALTER TABLE Employee ADD Experience INT;

III.

Department	COUNT(*)
IT	3
HR	1
Finance	1

(1 mark for each correct answer)

3

Q No.	**Section-D**	**Marks**

33

I. import matplotlib.pyplot

II. plt.plot(Months, Revenue, label='Revenue (in Lacs')

III. plt.title('Monthly Revenue Analysis')

IV. plt.savefig('monthly_revenue.png')

(1 mark for each correct answer)

4

34 A.

I. SELECT UPPER(Name), UPPER(City) FROM Student ORDER BY Name;

II. SELECT StudentID, MONTHNAME(Admission_Date) FROM Student;

III. SELECT AVG(Marks)FROM Student;

IV. SELECT City, COUNT(*) FROM Student GROUP BY City;

(1 mark for each correct query)

OR

B.

I.

Name	**LENGTH(Name)**
Aryan	5
Ayesha	6

4

II.

lower(Name)
aryan

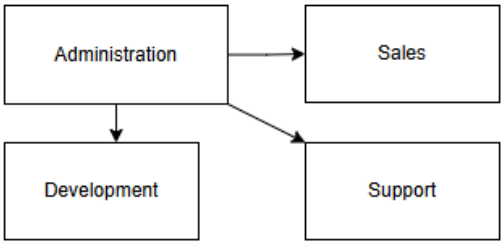
III.

AVG(Marks)
86.0000

IV.

Name	Marks
Ayesha	90
Maria	95

(1 mark for each correct output)

Q No.	Section-E	Marks
35	I. The server should be installed in the Administration department as it has the most number of computers. II. Cable Layout  III. Switch/Hub IV. WAN (Wide Area Network), as the offices are located in different cities. V. Repeater *(1 mark for each correct answer)*	5
36	I. print(df.tail(3)) II. df['Experience'] = [5, 8, 10, 6, 7] III. df.drop(columns=['Salary'], inplace=True) IV. df.rename(columns={'Department': 'Dept'}, inplace=True) V. print(df[["Name", "Salary"]]) *(1 mark for each correct answer)*	5
37	A. I. SELECT LEFT(product_code, 5) FROM Products; II. SELECT COUNT(Order_Id) FROM Orders; III. SELECT YEAR(order_date) FROM Orders; IV. SELECT TRIM(Address) FROM Customers;	5

		V. SELECT DATE(NOW()); *(1 mark for each correct query)* **OR**	
	B.	I. SELECT LENGTH('DatabaseSystems'); II. SELECT INSTR(Product_Name, 'a') FROM Products; III. SELECT POWER(Tran_Amount, 2) FROM Transactions; IV. SELECT AVG(Salaries) FROM Employees; V. SELECT SUM(Salary) FROM Employees; *(1 mark for each correct query)*	