

Date:29/07/24 MONTLY TEST-2 (2024-25) Max marks:20
GRADE: XII INFORMATICS PRACTICES 065) Time: 50 min.

**General Instructions:** 

All questions are compulsory.

Qn.	SECTION A	Marks
No		allocated
1	What is a Series in Pandas? A. A 2D labeled data structure B. A 1D labeled array C. A 3D labeled data structure D. A data type in NumPy	1
2	Which method is used to create a DataFrame in Pandas? A. pd.DataFrame() B. pd.create_dataframe() C. pd.new_dataframe() D. pd.frame()	1
3	How do you select a single column from a DataFrame named `df`?  A. df.columnname B. df[columnname] C. df['columnname'] D. df(columnname)	1
4	Which function is used to read a CSV file into a DataFrame? A. pd.read_csv() B. pd.load_csv() C. pd.open_csv() D. pd.import_csv()	1
5	How do you rename columns in a DataFrame named `df`?  A. df.rename(columns={'old_name': 'new_name'})  B. df.columns({'old_name': 'new_name'})  C. df.rename_columns({'old_name': 'new_name'})  D. df.change_columns({'old_name': 'new_name'})	1
6	Which command is used to create a new table in MySQL? A. CREATE NEW TABLE B. MAKE TABLE C. CREATE TABLE D. ADD TABLE	1
7	What is the primary key? A. A key that uniquely identifies each row in a table B. A key that stores the primary value C. A key used to encrypt the database D. A key that defines foreign relations	1

Which of the following is a valid SQL aggregate function? 1 A. SUM() B. AGG() C. COLLECT() D. TOTAL() What is the command to retrieve all records from a table named 1 9 students`? A. SELECT ALL FROM students; B. SELECT \* FROM students; C. GET ALL FROM students; D. FETCH \* FROM students;

## **SECTION B**

10 Consider the following table 'Employee' and write down the gueries given below:

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<b>EmployeeID</b>	FirstName	LastName	Department	Salary
101	JOHN	SAVIOUR	HR	40000
102	BABU	VASU	CLERK	25000
103	CELIN	THOMAS	MANAGER	60000
104	UNNI	SASI	SALES	35000
105	MANU	CHERIAN	SALES	45000

- a) Insert a new record into the Employee table with the following details: EmployeeID = 106, FirstName = 'DAVID', LastName = 'KURIAN', Department = 'HR', Salary = 50000.
- b) Retrieve all records from the Employee table.
- c) Retrieve the first name and last name of all employees who work in the 'Sales' department.
- d) Retrieve the EmployeeID and Salary of employees who have a salary greater than 45000.
- e) Retrieve the first name and last name of employees whose first name starts with 'J'.
- f) Retrieve the first name and last name of employees whose last name ends with 'in'.
- g) Retrieve the first 3 characters of the first name of all employees.
- h) Retrieve the departments from the Employee table without repeating the values.
- i) Calculate the total salary of all employees.
- j) Find the average salary of employees in the 'Sales' department.

		SEC	TION C				
11	Write a MySQL query to create a table named `Students` with the following structure:						
	Column Name	Datatype	Size	Constraints			
	StudentID	INT	5	Primary Key			
	FirstName	VARCHAR	50	NOT NULL			
	LastName	VARCHAR	50				
	Gender	CHAR	1				
	DateOfBirth	DATE					
	Class	INT	4				
	Email	CHAR	40				
	Fee	DOUBLE	(10,2)				
12	Predict the output	<u> </u>			3		
	a. SELECT 5+3 AS 'RESULT' FROM DUAL;						
	b. SELECT POW (3,3) FROM DUAL;						
	c. SELECT SQRT (25);						
	d. SELECT ROUND (34.6);						
	e. SELECT ROUND (457.564,1);						
	f. SELECT ROUND (5687.546,-2);						