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HOLIDAY HOMEWORK 2026-2027

SUBJECT: INFORMATICS PRACTICES - 12 B

Assignment: (TAKE PRINTOUT OF THIS HOLIDAY HOMEWORK QUESTION PAPER SUBMIT WITH ANSWER IN A4 SHEET)

1) Create a team with your Classmate per team 3 members or 2 members and Research the Project Topic in Website with Project Description also. Submit Hardcopy with along your teammate name on School Reopen that Day.
2) Write a python program to create a Series object,Data Frame Object with using of all Attribute and in-build-function In A4 Sheet.
3) Write program to create a DataFrame:
   List of series ,List of Dictionary ,Dictionary of Series , Dictionary of Dictioanary
4) Write a SQL Commands for the Following Statements:

Q.1

Table : **ACTIVITY**

Acode	ActivityName	Stadium	ParticipantsNum	PrizeMoney	ScheduleDate
1001	Relay 100 × 4	Star Annex	16	10000	23-Jan-04
1002	High jump	Star Annex	10	12000	12-Dec-03
1003	Shot Put	Super Power	12	8000	14-Feb-04
1005	Long Jump	Star Annex	12	9000	01-Jan-04
1008	Discuss Throw	Super Power	10	15000	19-Mar-04

Table : **COACH**

Pcode	Name	Acode
1	Ahmad Hussain	1001
2	Ravinder	1008
3	Janila	1001
4	Naaz	1003

(*i*) To display the names of all activities with their Acodes in descending order.

(*ii*) To display sum of PrizeMoney for the Activities played in each of the Stadium separately.

(*iii*) To display the coach's names and Acodes in ascending order of Acode from the table COACH.

(*iv*) To display the content of all activities for which ScheduleDate is earlier than 01-01-2004 in ascending order of ParticipantsNum.

Q.2

Table : **STUDENT**

T_ID	Name	Age	Department	Date_of_join	Salary	Gender
1	Jugal	34	Computer Sc	10/01/2017	12000	M
2	Sharmila	31	History	24/03/2008	20000	F
3	Sandeep	32	Mathematics	12/12/2016	30000	M
4	Sangeeta	35	History	01/07/2015	40000	F
5	Rakesh	42	Mathematics	05/09/2007	25000	M
6	Shyam	50	History	27/06/2008	30000	M
7	Shiv Om	44	Computer Sc	25/02/2017	21000	M
8	Shalakha	33	Mathematics	31/07/2018	20000	F

Table : **POSTING**

P_ID	Department	Place
1	History	Agra
2	Mathematics	Raipur
3	Computer Science	Delhi

(*i*) To show all information about the teacher of History department.

(*ii*) To list the names of female teachers who are in Mathematics department.

(*iii*) To list the names of all teachers with their date of joining in ascending order.

(*iv*) To display teacher's name, salary, age for male teachers only.

(*v*) To display name, bonus for each teacher where bonus is 10% of salary.

Q.3

Table : **CABHUB**

Vcode	VehicleName	Make	Color	Capacity	Charges
100	Innova	Toyota	WHITE	7	15
102	SX4	Suzuki	BLUE	4	14
104	C Class	Mercedes	RED	4	35
105	A-Star	Suzuki	WHITE	3	14
108	Indigo	Tata	SILVER	3	12

Table : **CUSTOMER**

CCode	CName	Vcode
1	Hemant Sahu	101
2	Raj Lal	108
3	Feroza Shah	105
4	Ketan Dhal	104

(*i*) To display the names of all the white colored vehicles.

(*ii*) To display name of vehicle, make and capacity of vehicles in ascending order of their seating capacity.

(*iii*) To display the highest charges at which a vehicle can be hired from CABHUB.

(*iv*) To display the customer name and the corresponding name of the vehicle hired by them.

Q.4

Table : **CARDEN**

Ccode	CarName	Make	Color	Capacity	Charges
501	A-Star	Suzuki	RED	3	14
503	Indigo	Tata	SILVER	3	12
502	Innova	Toyota	WHITE	7	15
509	SX4	Suzuki	SILVER	4	14
510	C Class	Mercedes	RED	4	35

Table : **CUSTOMER**

CCode	Cname	Ccode
1001	Hemant Sahu	501
1002	Raj Lal	509
1003	Feroza Shah	503
1004	Ketan Dhal	502

(*i*) To display the names of all the silver colored cars.

(*ii*) To display name of car, make and capacity of cars in descending order of their seating capacity.

(*iii*) To display the highest charges at which a vehicle can be hired from CARDEN.

(*iv*) To display the customer name and the corresponding name of the cars hired by them.

Try this CaseBase Questions and Refer your Book. Submit in A4 Sheet:

Q5) Write a Python code to create a **DataFrame** 'Stock' by using dictionary: Name Price 0 Nancy Drew 150 1 Hardy boys 180 2 Diary of a wimpy kid 225 3 Harry Potter 550

Q6) Write a program to create a series object F1 using a dictionary that stores the number of furniture in each lab of your school. Note: Assume four furniture names are Table, Sofa, Chair and stool having 40, 2, 45, 26 items respectively and pandas library has been imported as pd.