

**WINTER BREAK HOMEWORK (WRITE DOWN IN AFTER PYTHON PROGRAMS PRACTICAL NOTEBOOK)**

**Q1**

**TEACHER**

CODE	TEACHERNAME	SUBJECT	DOJ	PERIODS	EXPERIENCE
1001	RAVI SHANKAR	ENGLISH	12/03/2000	24	10
1009	PRIYA RAI	PHYSICS	03/09/1998	26	12
1203	LISA ANAND	ENGLISH	09/04/2000	27	5
1045	YASHRAJ	MATHS	24/08/2000	24	15
1123	GANAN	PHYSICS	16/07/1999	28	3
1167	HARISH B	CHEMISTRY	19/10/1999	27	5
1215	UMESH	PHYSICS	11/05/1998	22	16

**ADMIN**

CODE	GENDER	DESIGNATION
1001	MALE	VICE PRINCIPAL
1009	FEMALE	COORDINATOR
1203	FEMALE	COORDINATOR
1045	MALE	HOD
1123	MALE	SENIOR TEACHER
1167	MALE	SENIOR TEACHER
1215	MALE	HOD

- (i) To display TEACHERNAME, PERIODS of all teachers whose periods less than 25.
- (ii) To display TEACHERNAME, CODE and DESIGNATION from tables TEACHER and ADMIN.
- (iii) To display CODE, TEACHERNAME and SUBJECT of all teachers who have joined the school in the year 1999
- (iv) To display details of TEACHER who have experience between 10 to 15 years and teaching PHYSICS subject
- (v) Display unique Designation from the table ADMIN
- (vi) Display TEACHERNAME, GENDER DESIGNATION from the table TEACHER, ADMIN who are taking periods more than 25
- (vii) Write a query to Change the PERIODS from 22 to 28 of CODE 1215
- (viii) Write a query to Delete the record of GANAN
- (ix) Add a new column in table TEACHER with name AadharNumber of string type
- (x) Write a query to display the list of column names, data type and key information of TEACHER table
- (xi) Write a query to add primary key on TEACHER table on CODE column
- (xii) What is the difference between (i) ALTER and UPDATE command (ii) DELETE and DROP command (iii) Equi-join and Natural Join
- (xiii) What will be the Degree and Cardinality of Resultant table if we perform Cartesian product of Table TEACHER and ADMIN?
- (xiv) Create an Index IDX\_TNAME on TEACHERNAME column of TEACHER table
- (xv) Write down the output of following queries:
  - (a) Select Substr('Twilight Saga',4,5)
  - (b) Select char(72)
  - (c) Select RIGHT('Practical',3)
  - (d) Select MOD(26,9)
  - (e) Select ROUND(21.929,2)
  - (f) Select TEACHERNAME,SUBJECT, GENDER, DESIGNATION from TEACHER, ADMIN where TEACHER.CODE = ADMIN.CODE and PERIODS < 24
  - (g) Select TEACHERNAME From TEACHER order by DOJ desc

**Q2**

**Write down the MongoDB queries**

*From text book : Page no. 584 (Question 1-10)*