ASSIGNMENT
INFORMATICS PRACTICES 065
CLASS XII (SCIENCE | COMMERCE)

Instructions:

- *The assignment is divided into two parts:*
  - *Theory*
  - *Practical*
- *Questions are the combinations of practical and Theory which contains 10 questions from each chapter*
- *All answers needs to be done in A4 sheet paper (Handwritten)*
- *Practical part to be done in your system (PC/Smartphone) and screenshots for all questions has to be taken and should be compiled in a single file (.docx/pdf)*
- *After completing the assignment crate a softcopy of your handwritten assignment and upload the theory assignment and practical assignment in the upload assignment section of: https://www.prabhatdas.site*
- *Chapters from which assignment is composed:*
  - *MySQL Revision Tour*
  - *MySQL Functions*
  - *Queries using SQL*
  - *Introduction to Computer Networks*

1.Theory Questions:

Chapter MySQL Revision Tour:

Q1: Write a query to create the following table with the corresponding values

Table: emp_details

Sl_No	EMP_NAME	SALARY	DOB	PHONE	DEPT
101	SAM	50000	2004-10-10	911	IT
202	RAM	30000	2006-10-12	100	SECURITY
303	BOB	80000	2003-10-10	102	HR
404	CHRIS	100000	2003-01-10	500	SALES
505	ANGELA	120000	2000-11-21	999	PURHCASE
606	ALEX	200000	1999-10-10	777	PURCHASE

Q2: Write a query to display the oldest employee
Q3: Write a query to get the details of those employees who are from IT department.
Q4: Write a query to get the details of the employee with Sl_No 101.
Q5: Write a query to update the name of Sl_No 101 to Krishna.
Q6: Write a query to display the details of employees who name starts with “R”
Q7: Write a query to increment the salary of all employees by 10%
Q8: Write a query to display the name of those employees whose salary is between 30000 and 50000
Q9: Display the name and date of birth of those employees who are from IT, HR and SALES department.
Q10: Display the details of employees who have character “A” in between their name.

Chapter MySQL Function:

Q1: Get the details of employee with maximum salary.
Q2: Get the average salary from employee details.
Q3: Write the output of round(66646,3)
Q4: Negative value can be passed as a second parameter in the round function. (T/F)
Q5: Difference between truncate and round
Q6: Display only the second and third character of name from emp_details.
Q7: Write a query to display the following dynamically:
“The name of the employee is EMP_NAME and salary is SALARY”
Q8: Write a query to display the details of all employees whose name is greater than 3 character.
Q9: Write a query to get the month name from the dob column.
Q10: Difference between sysdate() and now()

Chapter Queries using SQL:

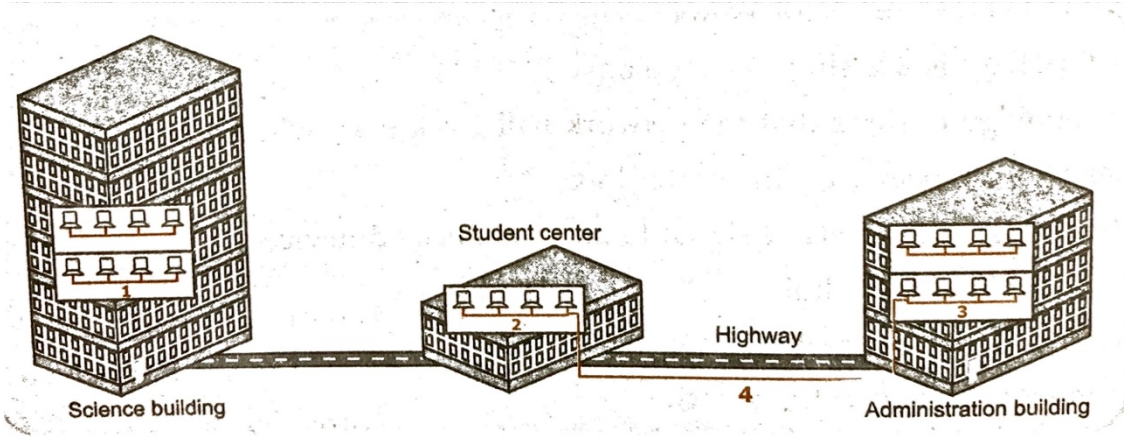
emp_no	ename	job	hire_date	sal	comm	deptno	grade
8369	SMITH	CLERK	1990-12-18	800	NULL	20	1
8499	ANYA	SALESMAN	1991-02-20	1600	300	30	3
8521	SETH	SALESMAN	1991-02-22	1250	500	30	2
8566	MAHADEVAN	MANAGER	1991-04-02	2985	NULL	20	4
8654	MOMIN	SALESMAN	1991-09-28	1250	1400	30	2
8698	BINA	MANAGER	1991-10-28	1150	1200	30	2
8839	AMIR	PRESIDENT	1991-11-28	1150	1200	10	2
8833	KULDIP	SALESMAN	1990-11-22	1000	NULL	10	1
8882	SHIAVNSH	MANAGER	1993-11-22	1000	NULL	20	1

Q1: Write a query to create the following table in SQL.
Q2: Write a query to display the details of employees in ascending order of salary.
Q3: Write a query to display the number of employees in each department.
Q4: Write a query to display the details of employees in ascending order of deptno and grade.
Q5: Write a query to display the name of job and no of people doing the job.
Q6: Display all the job with more than 3 people doing the job.

Q7: Difference between having and where clause.
Q8: Write a query to display the maximum salary in each job.
Q9: Write a query to display the number of employees with NULL commission.
Q10: Write a query to perform nested groupby operation in the above table.

Chapter Introduction to Computer Networks:

Q1: Govt. of Delhi has computer networks inside each of its buildings. It has now interconnected the networks Administration building and of Student center building. The networks so formed are marked below numbers. Mention which types of networks is each of these?



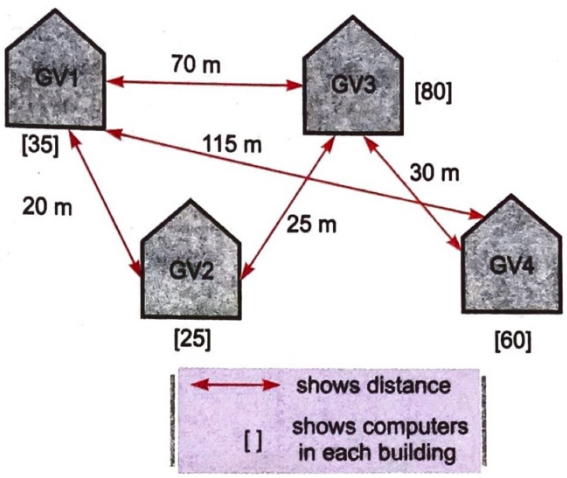
Q2: What is the difference between Hub, Switch and Router?
Q3: What are the different types of networking and internetworking devices?
Q4: Explain the type of topologies of networks?
Q5: Explain PAN, LAN, MAN and WAN
Q6: What are the different types of modems?
Q7: What are repeaters and routers?
Q8:

Global Village Enterprises has following four buildings in Hyderabad city :

Computers in each building are networked but buildings are not networked so far. The company has now decided to connect buildings also.

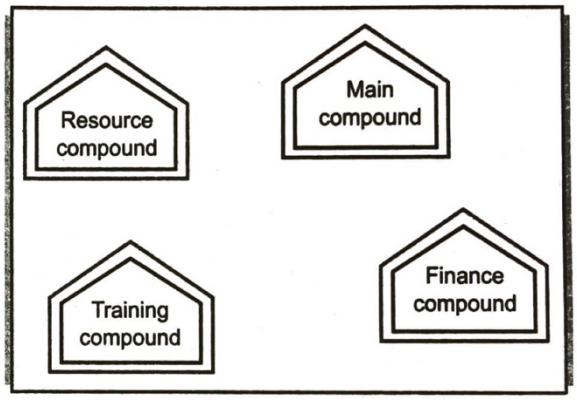
(*a*) Suggest a cable layout for these buildings.

(*b*) In each of the buildings, the management wants that each LAN segment gets a dedicated bandwidth *i.e.*, bandwidth must not be shared. How can this be achieved ?



Q9:

"Learn Together" is an educational NGO. It is setting up its new campus at Jabalpur for its webbased activities. The campus has 4 compounds as shown in the adjacent diagram.



Center to center distances between various Compounds as per architectural drawings (in Metre) is as follows :

Main Compound to Resource Compound	110 m
Main Compound to Training Compound	115 m
Main Compound to Finance Compound	35 m
Resource Compound to Training Compound	25 m
Resource Compound to Finance Compound	135 m
Training Compound to Finance Compound	100 m

Expected Number of Computers in each Compound is as follows :

Main Compound	5
Resource Compound	15
Training Compound	150
Accounts Compound	20

(*a*) Suggest a cable layout of connections between the compounds.

(*b*) Suggest the placement of the following devices with justification : (*i*) Repeater (*ii*) Hub/Switch

Q10: Two advantages and disadvantages of STAR topology