Task 1;

Que\_no 1 ans ;

SELECT s.department\_id,d.department\_name,

COUNT(s.department\_id) no\_sum

from students s INNER JOIN departments d

ON s .student\_id=d.department\_id

GROUP BY department\_id;

Que no 2 ans

SELECT c.course\_name,p.professor\_id, p.first\_name

from courses c

INNER JOIN professors p

ON c.professor\_id=p.professor\_id

Que 4

SELECT s.student\_id,s.first\_name

FROM students s

LEFT JOIN enrollments e

ON s.student\_id=e.student\_id

WHERE e.student\_id is null;

Que 5 ans

SELECT c.department\_id,d.department\_name,

COUNT(c.department\_id)

FROM courses c

INNER join departments d ON c.department\_id = d.department\_id

GROUP by c.department\_id;

Que no 6 ans

SELECT s.student\_id, s.first\_name,c.course\_id,course\_name

FROM students s

INNER JOIN enrollments en

ON s.student\_id= en.student\_id INNER JOIN courses c on

en. course\_id=c.course\_id

WHERE c.course\_name="Chemistry";

Que no 7

SELECT en.course\_id,c.course\_name,

COUNT(en.course\_id) no\_of\_student

FROM enrollments en

INNER JOIN courses c

on c.course\_id=en.course\_id

GROUP by en.course\_id

ORDER by no\_of\_student DESC;

Que no 8

SELECT AVG(c.course\_credits), d.department\_id

FROM courses c

INNER JOIN departments d

ON c.department\_id=d.department\_id;

Que no 9

SELECT c.professor\_id,p.first\_name,COUNT(c.department\_id)

FROM courses c

INNER JOIN professors p

ON c.professor\_id=p.professor\_id

GROUP by c.professor\_id;

Que no 10

SELECT c.course\_name,

MAX(

CASE

WHEN grade = 'A+' THEN 4

WHEN grade = 'A' THEN 3

WHEN grade = 'B' THEN 2

WHEN grade = 'C' THEN 1

ELSE NULL

END

) AS highest\_grade,

MIN(

CASE

WHEN grade = 'A+' THEN 4

WHEN grade = 'A' THEN 3

WHEN grade = 'B' THEN 2

WHEN grade = 'C' THEN 1

ELSE NULL

END

) AS lowest\_grade

FROM courses c

INNER JOIN enrollments e

ON c.course\_id=e.course\_id GROUP BY e.course\_id