ii) $\Pi_{Cname}\ \sigma_{Courses.CID = S.CID}\ ($

$($

$\rho_S\ (\Pi_{Teaches.CID}\ \sigma_{Teacher.TID = Teaches.TID\ \wedge\ Teacher.name = \text{"PPC"}}\ (Teacher \times Teacher)$

$) \times (Courses)$

iii) $\Pi_{Student.name} \sigma_{Takes.roll = Student.roll} ($

$(\Pi_{roll} \sigma_{Takes.CID = S.CID} ($

$(\rho_S(\Pi_{Teaches.CID} \sigma_{Teacher.TID = Teaches.TID} (Teacher \times Teach$
$\wedge Teacher.name = \text{"PPC"}$

$) \times Taker)$

$) \times Student)$

iii) $\Pi_{Timings.time\_schedule}(\sigma_{S.slot=Timings.slot}($

$(\rho_S(\Pi_{slot}(\sigma_{CLID="NC142"}(Teaches)))$

$) \times Timings)$

iv) $\Pi_{name}\ \sigma_{Student.roll = r.roll \wedge Takes.marks = r.max}$ (

ρ_r ($Takes.CID\ \gamma\ \rho_{max}^{MAX(marks)}$ (

$\Pi_{Takes.CID, roll, marks}\ \sigma_{S.CID = Takes.CID}$ (

(ρ_s ($\Pi_{Teaches.CID}\ \sigma_{Teacher1.TID = Teaches.TID \wedge Teacher1.name = "PPC"}$ (Teacher1 X Teache

) X Takes)

)) x Student x Takes)

v) $\Pi_{name}\ \sigma_{cnt = MAX(cnt)}$ (

roll g COUNT(grades)(

$\Pi_{roll,\ grades}\ \sigma_{grades = "EX"}$ (Grade_card)

) as cnt

)

Here, MAX (cnt) = (($\Pi_{MAX(cnt)}$ (roll g COUNT(grades)(

$\Pi_{roll,\ grades}\ \sigma_{grades = "EX"}$ (Grade_card)

) as cnt) .