# 2. tutorial Questions Answers:

# A.

## UNF

PAT\_APPOINMENT (staff\_no, dentist\_name, pat\_no, pat\_name, appointment, surgery\_no)

## 1NF

PAT\_APPOINMENT (staff\_no, pat\_no, dentist\_name, pat\_name, appointment\_date, appointment\_time, surgery\_no)

## Dependency diagram

staff\_no, appointment 🡪 pat\_no, surgery\_no FULL DEPENDENCY

staff\_no 🡪 dentist\_name PARTIAL DEPENDENCY

pat\_no 🡪 pat\_name TRANSITIVE DEPENDENCY

## 2NF:

PAT\_APPOINMENT (staff\_no, appointment, surgery\_no, pat\_no, pat\_name)

STAFF (*staff\_no,* dentist\_name)

## 3NF:

PAT\_APPOINMENT (staff\_no, appointment, surgery\_no, *pat\_no*)

STAFF (*staff\_no,* dentist\_name)

PATIENT (pat\_no, pat\_name)

# B.

## UNIT TABLE:

## UNF

UNIT(unit\_no, unit\_name, unit\_description, unit\_value)

## 1NF

UNIT(unit\_no, unit\_name, unit\_description, unit\_value)

## Dependency diagram

Unit\_no 🡪 unit\_name, unit\_description, unit\_value 🡪 FULL DEPENDENCY

## 2NF

UNIT(unit\_no, unit\_name, unit\_description, unit\_value)

## 3NF

UNIT(unit\_no, unit\_name, unit\_description, unit\_value)

## LECTURER DETAILS TABLE:

## UNF:

LECTURER (lectNo, lectName, lectOffice, lectPhone (unitNo, unitName))

## 1NF

LECTURER (*lectNo*, lectName, lectOffice, lectPhone)

lectNo🡪 lectName, lectOffice, lectPhone FULL DEPENDENCY

ADVISES(lectNo, unitNo, unitName)

unitNo 🡪 unitName PARTIAL DEPENDENCY

## 2NF

LECTURER (*lectNo*, lectName, lectOffice, lectPhone)

ADVISES(lectNo, *unitNo*)

UNIT (unitNo, unitName)

## 3NF

LECTURER (*lectNo*, lectName, lectOffice, lectPhone)

ADVISES(lectNo, *unitNo*)

UNIT (unitNo, unitName)

## STUDENT DETAILS:

## UNF:

STUDENT (studNo, studName, studAddress, courseEnr, modeOfStudy, lectNo, lectName (unitNo, unitName, year, sem, grade))

## 1NF:

STUDENT (studNo, studName, studAddress, courseEnr, modeOfStudy, mentorNo, mentorName)

lectNo🡪lectName Transitive Dependency

stuNo🡪 stuName, stuaAddress, stuCOurse, stuMonde, lectNo Full Dependency

ACADEMIC RECORD (studNo, unitNo, unitName, year, sem, grade)

unitNo🡪 unitName Partial Dependency

stuNo, unitNo, year, sem🡪 grade Full Dependency

## 2NF:

STUDENT (studNo, studName, studAddress, courseEnr, modeOfStudy, lectNo, lectName)

ACADEMIC RECORD (studNo, unitNo, year, sem, grade)

UNIT (unitNo, unitName)

### 3NF:

STUDENT (studNo, studName, studAddress, courseEnr, modeOfStudy, *lectNo*)

ACADEMIC RECORD (studNo, unitNo, year, sem, grade)

UNIT (unitNo, unitName)

LECTURER (lectNo, lectName)

COLLECTED 3NF Relation:

UNIT(unitNo)

LECTURER (*lectNo*, lectName, lectOffice, lectPhone)

ADVICES (lenctNo, unitNO, unitName)

UNIT (unitNo, unitName)

ATTRIBUTE SYNTHESIS:

1. 4. & 8.

UNIT (unitNo, unitName, unitDesc, unitValue)

1. & 6,