Minimal Functional Dependencies in Canonical Form

1. Employee:

Functional Dependencies:
(a) EID → EName
(b) EID → DOB
(c) EID → DOJ
(d) EID → Salary
(e) EID → Category
(f) EID → Qualification
(g) EID → Start_time
(h) EID → End_time
(i) EID → Gender

Normal Form: BCNF

2. Patient:

Functional Dependencies:
(a) PID → P_Name
(b) PID →Gender
(c) PID →DOB
(d) PID →Admit_from
(e) PID → Relation
(f) PID → In_date
(g) PID →In_time
(h) PID → Out_date
(i) PID → Out_time
(j) PID → ward_no
(k) PID → Bill_no

Normal Form: BCNF

3. Doctor:

Functional Dependencies:
(a) DID → Type

Normal Form: BCNF

4. Doctor-Speciality:

Functional Dependencies:
(a) DID, Speciality_name → DID, Speciality_name

Normal Form: BCNF

5. <u>Visitor:</u>

Functional Dependencies:
(a) VisitorID → Visitor_name
(b) VisitorID → stay_from
(c) VisitorID → stay_to

Normal Form: BCNF

6. <u>meet:</u>

Functional Dependencies:
(a) PID, VisitorID → PID, VisitorID

Normal Form: BCNF

7. <u>Appointment:</u>

Functional Dependencies:
(a) Appointment_No → App_name
(b) Appointment_No → Appointment_date
(c) Appointment_No → Appointment_time
(d) Appointment_No → fees

Normal Form: BCNF

8. <u>Appointment_with:</u>

Functional Dependencies:
(a) DID, Appointment_No → DID, Appointment_No

Normal Form: BCNF

9. <u>Treated_By:</u>

Functional Dependencies:
(a) DID,PID → DID, PID

Normal Form: BCNF

10. <u>Available_Wards:</u>

Functional Dependencies:
(a) Ward_no → Ward_type
(b) Ward_no → Ward_capacity
(c) Ward_no → Ward_ratePerday

Normal Form: BCNF

11. Available_Operation:

Functional Dependencies:
(a) Operation_id → Operation_name
(b) Operation_id → Operation_rate

Normal Form: BCNF

12. Available_Medicine:

Functional Dependencies:
(a) Medicine_id → Medicine_name
(b) Medicine_id →Medicine_rate

Normal Form: BCNF

13. Available_Test:

Functional Dependencies:
(a) Test_id → Test_name
(b) Test_id → Test_rate

Normal Form: BCNF

14. Bill:

Functional Dependencies:
(a) Bill_no → Bill_date
(b) Bill_no → PID
(c) Bill_no → Total_amount

Normal Form: BCNF

15. Ward_list:

Functional Dependencies:
(a) Ward_list_id →ward_no
(b) Ward_list_id → PID
(c) Ward_list_id → Stay_charges
(d) Ward_list_id → Bill_no

Normal Form: BCNF

16. Test_list:

Functional Dependencies:
(a) Test_list_id → Test_id

(b) Test_list_id → Test_date
(c) Test_list_id → Test_bill_date
(d) Test_list_id → Test_amount
(e) Test_list_id → DID
(f) Test_list_id → PID
(g) Test_list_id → Bill_no

Normal Form: BCNF

17. From:

Functional Dependencies:
(a) Test_list_id, Test_id → Test_list_id, Test_id

Normal Form: BCNF

18. Medicine_list:

Functional Dependencies:
(a) Medicine_list_id → Medicine_id
(b) Medicine_list_id → Prescription_date
(c) Medicine_list_id → Medicine_bill_date
(d) Medicine_list_id → Medicine_quantity
(e) Medicine_list_id → Medicine_amount
(f) Medicine_list_id → DID
(g) Medicine_list_id → PID
(h) Medicine_list_id → Bill_no

Normal Form: BCNF

19. has:

Functional Dependencies:
(a) Medicine_list_id, Medicine_id → Medicine_list_id, Medicine_id

Normal Form: BCNF

20. Operation_list:

Functional Dependencies:
(a) Operation_list_id → Operation_id
(b) Operation_list_id → Operation_date
(c) Operation_list_id → Operation_bill_date
(d) Operation_list_id → Operation_amount
(e) Operation_list_id → PID
(f) Operation_list_id → Bill_no

Normal Form: BCNF

21. <u>Performs:</u>

Functional Dependencies:
(a) Operation_id, DID → Operation_id, DID

Normal Form: BCNF

22. <u>Reports:</u>

Functional Dependencies:
(a) Test_list_id → Report_date
(b) Test_list_id → Remark

Normal Form: BCNF