Time Table Constraints

1. **No Student Clash**

2. **No Room Clash**

3. **No instructor Clash**

4. **Course total No of Credits equals to Total No of Weekly Lectures**

5. **Suitable Room Allotment (Based on Student Strength)**

6. **Suitable LABS are mapped for Practical courses**

7. **For Multiple section Courses lectures are arranged for all sections simultaneously**

8. **Lectures are arranged in multiple shifts**

1. No Student Clash

f_room_key	day	lecture_code	course_code	section
00010018_LR1	MON	LE4	ZOH101	SECTION-1
00010018_LT1	MON	LE4	ZOM102	SECTION-1
00010018_LT2	MON	LE4	MAM103	SECTION-1
00010018_R20	MON	LE4	MAH102	SECTION-1
00010024_AH	MON	LE4	MAM103	SECTION-2

No Room Clash

f_room_key	day	lecture_code	course_code	section
00010018_HALL	MON	LE1	CEC191	SECTION-1
00010018_LR1	MON	LE1	VDT504	SECTION-1
00010018_LR6	MON	LE1	CSM302	SECTION-1
00010018_LR8	MON	LE1	MAM504	SECTION-1
00010018_LT1	MON	LE1	AFR101	SECTION-1
00010018_LT2	MON	LE1	IOT102	SECTION-1
00010018_R20	MON	LE1	BOM501	SECTION-1
00010024_AH	MON	LE1	CEC191	SECTION-2
00010024_IFH2	MON	LE1	CEC191	SECTION-5
00010024_IFH4	MON	LE1	CEC191	SECTION-6
00010024_LT1	MON	LE1	CEC191	SECTION-3
00010024_LT2	MON	LE1	CEC191	SECTION-4
00010024_R1	MON	LE1	CEC191	SECTION-7
00010024_R7	MON	LE1	CEC191	SECTION-8

No instructor Clash

f_room_key	day	lecture_code	course_code	section	instructor
00010018_HALL	MON	LE1	CEC191	SECTION-1	G94
00010018_LR1	MON	LE1	VDT504	SECTION-1	pre01
00010018_LR6	MON	LE1	CSM302	SECTION-1	S223
00010018_LR8	MON	LE1	MAM504	SECTION-1	G065
00010018_LT1	MON	LE1	AFR101	SECTION-1	D069
00010018_LT2	MON	LE1	IOT102	SECTION-1	R148
00010018_R20	MON	LE1	BOM501	SECTION-1	S238

Course total No of Credits equals to Total No of Weekly Lectures

instructor	studentCount	courseType	course_code	type	course_name	credit
G94	585	T	CEC191	C	CULTURAL EDUCATION	2

585 -> 8 sections (80 student each)

LECTURE_CODE	MON	TUE
LE1	CEC191-HALL- (120) - (SECTION-1) , G94	CEC191-HALL- (120) - (SECTION-1) , G94
LE1	CEC191-AH- (140) - (SECTION-2) , G94	CEC191-AH- (140) - (SECTION-2) , G94
LE1	CEC191-IFH2- (100) - (SECTION-5) , G94	CEC191-IFH2- (100) - (SECTION-5) , G94
LE1	CEC191-IFH4- (100) - (SECTION-6) , G94	CEC191-IFH4- (100) - (SECTION-6) , G94
LE1	CEC191-LT1- (110) - (SECTION-3) , G94	CEC191-LT1- (110) - (SECTION-3) , G94
LE1	CEC191-LT2- (110) - (SECTION-4) , G94	CEC191-LT2- (110) - (SECTION-4) , G94
LE1	CEC191-R1- (100) - (SECTION-7) , G94	CEC191-R1- (100) - (SECTION-7) , G94
LE1	CEC191-R7- (100) - (SECTION-8) , G94	CEC191-R7- (100) - (SECTION-8) , G94

Suitable Room Allotment (Based on Student Strength)

Suitable LABS are mapped for Practical courses

Create Function

function_code	Description
BOT	BOTANY_LAB
CHE	Chemistry_Lab
COM	Digital/Computer
DAI	DAIRY_PRODUCT_LAB
ELE	Electical
MEC	Mechanical
PHY	PHYSICS_LAB
SOI	SOIL TESTING

Assign Function To Course_Code

course_code	function_code
BOH102	BOT
BOW101	BOT
BOW102	DAI
BOW104	BOT
CHH103	CHE
CHH103	CHE
CHM104	CHE
CHW101	CHE
CHW102	CHE
CHW103	CHE
CHW104	CHE
CSM103	COM
CSM103	COM
MAW101	ELE
MAW101	ELE

Assign Function To Room

room_code	capacity	function_code
LT1	80	NULL
LR1	50	NULL
LR6	40	NULL
LR5	40	NULL
dummy_physicsLab	30	PHY
LR7	30	NULL
dummy_BotanyLab	30	BOT
dummy_SoilTestingLab	30	SOI
LR8	30	NULL
dummy_DAIRY_PRODUCT...	30	DAI
CSR	30	NULL
BSc_Chemistry_Lab	30	CHE
BSc(H)/MSc_Lab	25	CHE
R20	25	NULL
BSc_Zoo_Lab	20	ZOO
Mech_Lab	20	MEC
Digital_Lab	20	COM
Elect_Lab	20	ELE

For Multiple section Courses lectures are arranged for all sections simultaneously

instructor	studentCount	course Type	course_code	type	course_name	credit
G94	585	T	CEC191	C	CULTURAL EDUCATION	2

585 -> 8 sections (80 student each)

LECTURE_CODE	MON	TUE
LE1	CEC191-HALL- (120) - (SECTION-1) , G94	CEC191-HALL- (120) - (SECTION-1) , G94
LE1	CEC191-AH- (140) - (SECTION-2) , G94	CEC191-AH- (140) - (SECTION-2) , G94
LE1	CEC191-IFH2- (100) - (SECTION-5) , G94	CEC191-IFH2- (100) - (SECTION-5) , G94
LE1	CEC191-IFH4- (100) - (SECTION-6) , G94	CEC191-IFH4- (100) - (SECTION-6) , G94
LE1	CEC191-LT1- (110) - (SECTION-3) , G94	CEC191-LT1- (110) - (SECTION-3) , G94
LE1	CEC191-LT2- (110) - (SECTION-4) , G94	CEC191-LT2- (110) - (SECTION-4) , G94
LE1	CEC191-R1- (100) - (SECTION-7) , G94	CEC191-R1- (100) - (SECTION-7) , G94
LE1	CEC191-R7- (100) - (SECTION-8) , G94	CEC191-R7- (100) - (SECTION-8) , G94

Lectures are arranged in multiple shifts

lecture_code	lecture_time	shift
LE1	07:00:00	MORNING
LE2	08:00:00	MORNING
LE3	09:00:00	MORNING
LE4	10:00:00	MORNING+AFTERNOON
LE5	11:00:00	MORNING+AFTERNOON
LE6	12:00:00	MORNING+EVENING+AFTERNOON
LE7	13:00:00	EVENING+AFTERNOON
LE8	14:00:00	EVENING+AFTERNOON
LE9	15:00:00	EVENING+AFTERNOON
LE10	16:00:00	EVENING
LE11	17:00:00	EVENING

M

A

E