Pr4. ELECTRICAL DRAWING

Name of the Course: Diploma in Electrical Engineering			
Faculty: Mahesh Kumar Biswal			
Course code:	Pr4	**Semester**	4th
Total Period:	90		
Theory periods:	6P/week	**Examination**	3hrs
		Term work	25
Maximum marks:	125	**End Semester Examination:**	100

TOPIC WISE DISTRIBUTION OF PERIODS

Sl. No.	Topics	Periods
1.	Wiring Diagram of Starters	18
2.	Development of DC armature winding	18
3.	1 φ and 3 φ transformer	12
4.	Sketches of Earthing and LT and HT line	18
5.	Single line diagram substation	09
6.	Auto CAD practice	15
TOTAL		**60**

LESSON PLAN

Week	Day	Theory topic
1st	1st	**WIRING DIAGRAM AND CONTROL CIRCUIT:** 3 point D. C. motor starter
	2nd	do
	3rd	do
	4th	4 point D.C. motor starter.
	5TH	do
	6th	do
2nd	1st	DOL starter
	2nd	do
	3rd	do
	4th	Star delta starter
	5th	do
	6th	do
3rd	1st	Auto Transformer Starter.

	2nd	do
	3rd	do
	4th	Rotor resistance starter.
	5th	do
	6th	do
4th	1st	**D.C. M/C PARTS:** Pole with pole shoes.
	2nd	do
	3rd	do
	4th	Commutator
	5th	Do
	6th	do
5th	1st	Armature
	2nd	Do
	3rd	do
	4th	Simple lap 1 layer winding
	5th	do
	6th	do
6th	1st	Simple lap double layer winding
	2nd	do
	3rd	do
	4th	Simple wave 1 layer winding
	5th	do
	6th	do
7th	1st	Simple wave double layer winding
	2nd	do
	3rd	do
	4th	**DRAW 1-PHASE & 3-PHASE TRANSFORMER:** single phase stepped core type transformer
	5th	do
	6th	do
8th	1st	Three phase stepped core type transformer
	2nd	do
	3rd	do
	4th	single phase shell type transformer
	5th	do
	6th	do
9th	1st	Three phase shell type transformer
	2nd	do
	3rd	do
	4th	**Earthing:**Pipe earthing
	5th	do

	6th	do
10th	1st	Plate earthing
	2nd	do
	3rd	do
	4th	Double pole structure for LT distribution lines
	5th	do
	6th	do
11th	1st	Double pole structure for HT distribution lines
	2nd	do
	3rd	do
	4th	Double pole structure for LT distribution lines with guard wire
	5th	do
	6th	do
12th	1st	Double pole structure for HT distribution lines with guard wire
	2nd	do
	3rd	do
	4th	**SINGLE LINE DIAGRAM OF SUBSTATION:** Single line diagram of 33/11kV distribution substation.
	5th	do
	6th	Do
13th	1st	Single line diagram of a 11/0.4 kV distribution substation.
	2nd	Do
	3rd	do
	4th	Draw Electrical symbols
	5th	do
	6th	do
14th	1st	Draw D.C. m/c parts
	2nd	do
	3rd	do
	4th	Draw A. C. m/c parts
	5th	do
	6th	do
15th	1st	Draw electrical layout of diagram of Electrical Installation of a bldg
	2nd	do
	3rd	do
	4th	do
	5th	do
	6th	do

Signature of HOD(electrical)

Mahesh Kumar Biswal.
Signature of faculty