

COURSE TITLE : CONSTRUCTION ENGINEERING LAB
COURSE CODE : 3019
COURSE CATEGORY : B
PERIODS/WEEK : 3
PERIODS/SEMESTER: 45
CREDITS : 2

TIME SCHEDULE

Module	Topics	Period
1	Construct brick wall corners ,junctions, and piers in English bond and Flemish bond Setting out a building	15
2	Plumbing practice	12
3	Painting practice	9
4	Electrical wiring practice	9
TOTAL		45

COURSE OUTCOME

Sl.	Sub	Student will be able to
1	1	Construct masonry works
	2	Set out a building
	3	Do the plumbing works
2	1	Do the painting works on different surfaces
	2	Do the electrical wiring

SPECIFIC OUTCOME

Upon completion of the study, the student should be able to:

1.1.0 Setting out a small building in the field by three- four- five rule (Compulsory)

- 1.1.1 Construct a right angle by using three – four –five rules
- 1.1.2 Compute the Centre line of the building

2.1.0 Perform brick masonry

- 2.1.1 Construct one, one and a half, & two brick wall in English Bond and Flemish bond.
- 2.1.3 Construct one brick thick wall in Rat trap bond.
- 2.1.4 Construct a cross wall of one brick thick in English Bond and Flemish bond.
- 2.1.5 Construct a cross wall of one brick thick with one an a half main wall in English Bond and Flemish bond.

2.1.6 Construct one brick pier in English bond and one and a half brick pier in English Bond and Flemish bond.

2.1.7 Construct two brick pier in English Bond and Flemish bond.

3.1.0. Perform plumbing practice

3.1.1 Identify and sketching of tools and fittings in plumbing and sanitary wares.

3.1.2 Do thread cutting on G I pipe and PVC pipes 20mm & 25mm

3.1.3 Do fitting of pipes, specials, taps, shower, etc.

3.1.4 Do service connection from water supply mains

3.1.5 Connect closets, wash basins, flushing cisterns, flushing valves

3.1.6 Connect different types of water traps.

3.1.7 Connect drainage to public drainage system

3.1.8 Do water connections to plumbing and sanitary appliances

4.1.0. Painting practice

4.1.1 Perform painting on wood work

4.1.2 Perform painting on Metals surfaces

4.1.3 Perform white washing and Colour washing

4.1.4 Perform painting with distempers and emulsion paints.

5.1.0. Perform electrical wiring practice (not for examination)

5.1.1 Do Single phase wiring- one lamp controlled by one switch and one lamp controlled by Two switches.

5.1.2 Familiarize connections to Plug & Socket, DP & TP main switch, MCB & ELCB, Earthing, lightning arrester etc.

CONTENT DETAILS

1. Setting out of a Residential building
2. Brick Masonry - English bond- Flemish bond- Rat trap bond
3. Plumbing practice and sanitary practice
4. Painting Practice
5. Electrical wiring.