NAME OF FACULTY : **G.F**

DISCIPLINE : **CIVIL ENGG.**

SEMESTER : **5TH**

SUBJECT **: PLUMBING SERVICES**

LESSON PLAN DURATION : **15WEEKS**

**DURATION- L-3,P-2/WEEK**

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| **WEEK** | **THEORY** | | **PRACTICAL** | |
|  | LECTURE DAY | *TOPIC (INCLUDING ASSIGNMENT/TEST)* | PRACTICAL DAY | TOPIC |
| 1ST | 1ST | SELECTION, USE AND CARE OF TOOLS REQUIRED FOR  PLUMBING WORK |  | CARRY OUT SIMPLE JOB REQUIRING CUTTING MILD STEEL PLATE, FILING, DRILLING AND TAPPING HOLES ETC. |
| 2ND | SUCH AS THREADING DIE, BIT BRACE, RATCHET BRACE, PIPE WRENCH, |
| 3RD | REVISION AND ASSIGNMENT |
| 2ND | 1ST | SPANNER SET, PIPE CUTTER, PIPE VICE, HACKSAW, |  | CARRY OUT SIMPLE JOB REQUIRING CUTTING MILD STEEL PLATE, FILING, DRILLING AND TAPPING |
| 2ND | CH-1ST REVISION AND TEST |

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|  | 3RD | CHISEL, FILES AND OTHER COMMON HAND TOOLS, BENCH DRILLING MACHINE, SOLDERING IRON |  | HOLES ETC. |
| 3RD | 1ST | **1. PIPES AND PIPE FITTING**  SELECTION AND USE OF DIFFERENT PIPES LIKE GI PIPES, PLASTIC PIPES, |  | PRACTICE  CU TTING, THREADING AND BENDING OF METAL PIPES; CUTTING AND SHAPING OF PVC PIPES |
| 2ND | TEST 2ND CHAPTER |
| 3RD | PVC PIPES, HDPE PIPES, CAST IRON PIPES, |
| 4TH | 1ST | PLUMBING SYMBOLS; BENDS, ELBOWS, SOCKETS, TEES, UNIONS, PIPE CUTTING, |  | REVISION AND DEMONSTRATE |
| 2ND | ASSIGNMENT FOR VARIOUS PIPES |
| 3RD | PIPE BENDING, PIPE THREADING, PIPE  JOINTS, PIPE FITTING,  ALIGNMENT OF PIPES, BRANCHING OF PIPES, |

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| 5TH | 1ST | SAFETY PRECAUTIONS  2. **WATER SUPPLY SYSTEM**  SOURCES OF WATER |  | CARRY OUT SIMPLEPIPE  CONNECTIONS REQUIRING  USE OF BENDS, TEES, ELBOWS ETC. |
| 2ND | TEST |
| 3RD | ; RAINWATER HARVESTING; WATER SUPPLY SYSTEMS IN A  TOWN; |
| 6TH | 1ST | WATER  DISTRIBUTION SYSTEMS;  DISTRIBUTION  RESERVOIRS |  | CARRY OUT SIMPLE PIPE CONNECTIONS REQUIRING USE OF BENDS, TEES, ELBOWS ETC. |
| 2ND | REVISE TILL NOW |
| 3RD | ; PUMPS; VALVES; FIRE HYDRANTS; STORAGE OF WATER IN BUILDINGS; |

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| 7TH | 1ST | TYPES OF TANKS; LAYING WATER SUPPLY PIPE LINES |  | ERECT SIMPLE WATER SUPPLY SYSTEM |
| 2ND | **REVISION** |
| 3RD | **DOMESTIC DRAINAGE**  DRAINAGE SYSTEM (TWO PIPE, ONE PIPE, SINGLE  STACK |
| 8TH | 1ST | AND OTHER  SYSTEMS),  TRAP, CESSPOOL, |  | ERECT SIMPLE WATER SUPPLY SYSTEM |
| 2ND | ASSIGNMENT ANS TEST |
| 3RD | SCEPTIC TANK, CLEANING BLOCKED PIPES AND |
| 9TH | 1ST | DRAINS, LAYING SANITARY  AND SEWER PIPES, MANHOLES, |  | TEST DRAINAGE LINES BY USING DIFFERENT TESTING METHODS |
| 2ND |  |
| 3RD | INSPECTION AND TESTING  (PRESSURE & LEAKAGE TEST, |
| 10TH | 1ST | TESTING STRAIGHTNESS  OF PIPES, BALL TEST ETC.); FIXING |  | TEST DRAINAGE  LINES BY USING DIFFERENT |

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|  |  | 2ND | |  | |  | | TESTING METHODS |
| 3RD | | ACCESSORIES,  PROBLEMS IN  DRAINAGE AND THEIR SOLUTION | |
|  | 11TH | 1ST | | **SANITARY APPLIANCES INTRODUCTION**  FLUSH TOILET, SQUAT TOILET, | |  | | PRACTICE FIXING OF DIFFERENT VALVES INSTALL SANITARY FITTINGS LIKE WASHBASIN, SINK, FLOOR TRAPS, URINAL, BATHTUB AND HEATING APPLIANCE LIKE GEYSER |
| 2ND | | TEST AND REVISION | |
| 3RD | | WASH BASIN, SINK, | |
| 12TH | | 1ST | FLOOR TRAPS, URINAL,  BATHTUB, SHOWER, | |  | | PRACTICE FIXING OF DIFFERENT VALVES INSTALL SANITARY FITTINGS LIKE WASHBASIN, SINK, FLOOR TRAPS, URINAL, BATHTUB AND HEATING APPLIANCE LIKE GEYSER | |
| 2ND | ASSIGNMENT | |
| 3RD | BIDET, MIXING TAP, POPUP WASTE | |
| 13TH | | 1ST | **HEATING SYSTEM INTRODUCTION** | |  | | VIVA QUESTION | |
| 2ND |  | |
| 3RD | HEAT TRANSFER, | |
| 14TH | | 1ST | WATER HEATER, | |  | | VIVA QUESTION | |
|  | | 2ND | TEST AND ASSIGNMENT | |  | |  | |
|  | | 3RD | GEYSER, DOMESTIC  HOT WATER SUPPLY SYSTEM, | |  | |  | |
| 15TH | | 1ST | CENTRAL HEATING, SOLAR WATER HEATER | |  | | | VIVA QUESTION |
| 2ND | Plumbing | |