**DIPLOMA IN REFRIGERATION & AIR CONDITIONING ENGINEERING**

**SYLLABUS**

**ELECTRICITY**

1. **FUNDAMENTAL OF ELECTRICITY TYPES**
2. **CIRCUIT**
3. **CURRENT**
4. **TRANSFORMER**
5. **MOTORS**
6. **METERS**
7. **CAPACITOR**

* **STARTING CAPACITOR**
* **RUNNING CAPACITOR**

1. **RESISTANCE**
2. **MOTOR TYPE**

* **SIGNAL PHASE**
* **THREE PHASE**

1. **RELAY TYPE**
2. **RELAY CHECKING**
3. **ELECTRIC MOTOR**

* **A.C MOTOR**
* **D.C MOTOR**

1. **WINDING**
2. **TERMINAL CHECKING**
3. **OHMS LAW**

**FUNDAMENDAL OF REFRIGERATION & AIR CONDITION**

1. **WHAT IS REFRIGERATION?**
2. **WHAT IS HEAT**
3. **TYPES OF HEAT**
4. **HEAT TRANSMISSION METHOD EXPLAIN**
5. **PRESSURE**
6. **PRESSURE UNIT**
7. **TON OF REFRIGERATION?**
8. **METHOD OF REFRIGERATION**
9. **VCS SYSTEM**
10. **VAS SYSTEM**
11. **REFRIGERANT**
12. **TYPES OF REFRIGERANT**
13. **REFRIGERANT CHEMICAL NAME & CHEMICAL FORMULA**
14. **ALTERNATIVE REFRIGERANT**
15. **METHOD OF REFRIGERANT RECOVERY**
16. **METHOD OF LEAK TESTING**
17. **OIL TYPES**
18. **LUBRICATION SYSTEM**
19. **DESRABLE PROPERTIES OF LUBRICATION OIL**
20. **TYPES OF COMPRESSOR**
21. **TYPES OF CONDENSER**
22. **TYPES OF EVAPORATOR**
23. **TYPES OF THROTTLING DEVICE**
24. **TYPES OF COOLING TOWER**
25. **NRE – NET REFRIGERANT EFFECT R22**
26. **REFRIGERATOR**
27. **ELECTRICAL PARTS OF REFRIGERATOR**
28. **SINGLE DOOR REFRIGERATOR WIRING DIAGRAM**
29. **DOUBLE DOOR REFRIGERATOR WIRING DIAGRAM**
30. **AIR CONDITIONER**
31. **INSTALLATION OF WINDOW AIR CONDITIONER**
32. **SPLIT AIR CONDITIONER**
33. **AIR CIRCULATION**
34. **TROUBLE SHOOTING OF AIR CONDITIONER**
35. **SERVICE IN THE SPLIT AIR CONDITIONER**
36. **CAR A/C WIRING AND PRACTICAL EXPLAIN**
37. **THERMAL CONTROL SWITCH**
38. **RECEIVER**
39. **DEEP FREEZER**
40. **DUCT**
41. **PACKAGE A/C**
42. **AIR COOLER**
43. **CENTRAL PLANT A/C**
44. **CENTRAL PLANT CHILLER SYSTEM**
45. **TRANSPORT A/C**
46. **VACUM**
47. **REFRIGERANT (GAS) CHARGING**
48. **REFRIGERATION EQUIPMENTS**
49. **SAFETY DEVICES**
50. **BLUE STAR**
51. **COMPRESSOR WORKING TYPE**
52. **HVAC TOOLS**
53. **HVAC MAINTENANCE**
54. **METER TYPES**

**COMMERCIAL & TRANSPORT PURPOSE**

1. **PURPOSE OF AIR CONDITION**
2. **BLUE STAR CHILLER CAREER CHILLER**
3. **AUTOMOBILE AIR CONDITION**
4. **REFRIGERATED VEHICLES**
5. **COLD STORAGE AIR CONDITIONER**
6. **CSCR METHOD WRING OF WINDOW A/C**
7. **PSC METHOD OF SPLIT A/C WRING**