I. JOB TITLE : FIRE SERVICES ELECTRICAL FITTER

II. JOB LEVEL : SKILLED WORKER

III. JOB DESCRIPTION : Installs, tests, inspects, maintains and repairs automatic fire alarm (AFA) and manual fire alarm systems, and electrical/electronic parts of fire services systems.

## IV. TRADE SKILLS : Ability to:

- 1. Correctly use and maintain the tools of the trade including power tools, test equipment and measuring instruments.
- 2. Install, operate and properly maintain fire services systems and equipment in electrical/electronic aspects according to stipulated procedures.
- 3. Locate and repair faults in fire services systems and equipment.
- 4. Overhaul and service electrical parts of fire services systems and electrical/electronic equipment of the systems.
- 5. Use safety equipment, and protective devices and equipment.
- 6. Read and interpret fire services system schematic drawings, installation plan, electrical wiring and circuit diagrams, and layout plans.
- 7. Inspect, test and commission electrical parts of the services systems.
- 8. Correctly dispose waste chemicals, equipment containing radioactive substances and unused extinguishing agents involved.
- 9. Correctly instruct, supervise and transfer skills to any apprentice and semi-skilled worker assigned to him to ensure safety and quality of work.

## V. TRADE THEORY : Knowledge of:

- 1. Basic fire services engineering technology:
- 2. Basic workshop practice, engineering materials, welding, conduit and wiring.
- 3. Line diagrams and layout drawings for fire service systems.
- 4. Operating principles of electrical/electronic equipment of fire services systems.
- 5. Motors and starting methods and control equipment.
- 6. Single and three-phase circuits, earthing and general protection.
- 7. Interface between electrical/electronic and mechanical equipment of fire services systems, and between fire service systems and building services systems in a building.
- 8. Basic operating principles of fire extinguishing agents including gaseous extinguishing agents and its applications.
- 9. Basic environmental technology.
- 10. Industrial hazards, safety and health precautions, energy saving and environmental concerns.
- 11. Installation practice and regulations, and relevant codes of practice.
- 12. Relevant ordinances and regulations.

## VI. ENTRY ROUTE : Preferred Minimum Entry Qualification:

Completion of Secondary 3.

Training:

4-year organized apprenticeship or 3-year organized apprenticeship if preceded by a relevant one-year full-time basic craft course, with attendance at a relevant part-time day-release or block-release craft course in an institute of vocational education or equivalent.