

नेपाल नागरिक उड्डयन प्राधिकरण  
प्रविधिक सेवा, इलेक्ट्रोनिक एण्ड टेलिकम्युनिकेशन इन्जिनियरिङ्ग समूह, पाँचौं तह, वरिष्ठ सहायक पदको प्रयोगात्मक  
परीक्षाको पाठ्यक्रम  
पूर्णाङ्क : ३० उत्तीर्णाङ्क : १५

**Group-A**

**10 Marks**

- 1. Introduction of soldering joints**
  - 1.1. Characteristics of soldering lead
  - 1.2. Soldering method
  - 1.3. Usage of soldering flux
  - 1.4. Common types of soldering defects
  - 1.5. Choosing proper soldering iron temperature
- 2. Safety at electronics workshop**
  - 2.1. Introduction
  - 2.2. Use
  - 2.3. Importance
  - 2.4. ESD Protection
- 3. Common Electrical Components used in Electrical**
  - 3.1. Circuit breaker, MCB, RCCB, isolators
  - 3.2. Coaxial cable and types
  - 3.3. Transmission lines and types
  - 3.4. Common plug types
  - 3.5. Workbench Tools and equipment

**Group-B**

**10 Marks**

- 4. Common Energy Storage devices**
  - 4.1. Types, Charging characteristics and maintenance
  - 4.2. Safety precaution while handling flooded-type batteries
  - 4.3. Introduction, uses and method of using hydrometer
- 5. Types of Power Supply**
  - 5.1. Types of UPS
  - 5.2. PV Supply components and trouble-shooting
  - 5.3. Switch-over and AMF panel

**Group-C**

**10 Marks**

- 6. RF measurements**
  - 6.1. Use of Wattmeter
  - 6.2. Application of dummy load
  - 6.3. Calculation of Forward Power, Reverse Power, VSWR
- 7. Test Equipment**
  - 7.1. Common electronic bench test equipment
  - 7.2. Types of probes
  - 7.3. Usage
  - 7.4. Safety precaution