Certified PC Hardware and Networking Assistant

(Detailed Curriculum)

Section 1

Detailed Syllabus of Course

SL	Module Title	Topics	Duration (Hours)		Learning Outcome
			Theory	**Lab**	
1	**Introduction to Computer and its peripheral**	Mouse, Key Board, Printers, Display Devices & Data Storage Devices, Video Display, Hardware Organization of PCs, Power Supplies, System Diagnostic Tools	40	60	After completing this unit, Learner will be able to ● Know the types of Peripheral Devices. ● Know the Working of Peripherals Devices and applications. ● Well versed in troubleshooting and identification of Components-Printers, Mouse, Keyboards. ● Learn Various Display types and its operation. ● Understand working of LED , LCD, TFT. Plasma, Quantum Dot Flexible and Rollable Display. ● Online Data Storage ● Offline Data Storage
2	**PC Hardware**	Power Supplies Motherboard Chipset Primary and Secondary Memories Buses & I/O Ports BIOS Booting and POST test	30	40	Acquiring Knowledge on ● Active and passive device ● Digital Logic Circuits. ● Fuse, relays and panel components identification.

3	**Computer Networking**	Types of Networks, Protocols in Networking, ISO-OSI Layer Protocol, Networking elements, TCP/IP, UTP cable crimping using RJ 45 connectors, Concepts of Switching and Routing, Service Provider network to connect Internet	50	80	
		Sub-total	**120**	**180**	
4	Employability Skill	1. Introduction to Employability Skills 2. Career Development & Goal Setting 3. Becoming a Professional in the 21st Century 4. Basic English Skills 5. Communication Skills 6. Financial and Legal Literacy 7. Entrepreneurship 8. Diversity & Inclusion 9. Constitutional values - Citizenship 10. Essential Digital Skill	30		Learner will be able to know the various qualities required for employability
5	Project / OJT		60		Learners will carry out a Project using the knowledge learned in this course. Or Learner will experience a working environment where Repair & Maintenance of Power Supply, Inverter & UPS are done

Total Duration: 390 hours
Theory: 120 Hours
Practical: 180 Hours
OJT: 60 Hours
ES: 30 Hours

Section 2

LIST OF EQUIPMENT (For a batch of 30 students)

1	Classroom	1	30 Sq M
2	Student Chair	30	
3	Student Table	30	
5	LCD Projector	1	
6	Trainer Chair & Table	1	
7	Pin up Boards	1	
8	White Board	1	

Section 3

TRAINER PROFILE

Level: 3

Batch Size: 30 students

No of Trainers: 1

No of demonstrators: 1

Education Qualification	a. B.E./B. Tech in Electronics/Electronics & Telecommunication/Electronics & Communication with one year experience in the relevant field. OR b. Diploma in Electronics/Electronics & telecommunication/Electronics & Communication from recognized board of technical education with two years' experience in the relevant field. OR **c.** National Apprentice Certificate (**NAC**) / National Trade Certificate (**NTC**) in the trade with three years' experience respective in the relevant field.
Technical Skills	● Hands on Knowledge on PC Hardware and Networking ● Good understanding of Electrical and Electronics
Other Skills	● Should be able to communicate well in English ● Good command on regional language ● Knowledge of working with Power Supply, Inverter & UPS ● Should be able to prepare lesson plan, deliver the courses through the specified media as per schedule ● Should be able to aspire the trainees &evaluate and assess the trainees ● Should be able to monitor progress and give feedback to trainees ● Should be able to maintain MIS related to training