

Installation & Servicing of CCTV Camera, Security Alarm & Smoke Detector

Qualification Title	Installation & Servicing of CCTV Camera, Security Alarm & Smoke Detector
Qualification code	NARQ30056-PROCESS
Pre-requisites to training	Inclination for taking Installation & Servicing of CCTV Camera, Security Alarm & Smoke Detector as a self employment occupation. Able to read and write local language. Age group between 18 to 45 years.
Training outcomes	<p>At the end of the training, the candidates will be able to</p> <ol style="list-style-type: none"> 1. Appreciate the importance of embarking on self-employment and has developed the confidence and personal skills for the same. 2. Identify business opportunities in chosen sector / sub-sector and plan and market and sell products / services 3. Start a small business enterprise by liaising with different stake holders 4. Effectively manage small business enterprise 5. Know features and components of CCTV 6. Understand installation of CCTV 7. Knows servicing of the CCTV 8. Knows working of smoke detector 9. Knows the installation and working of Alarm system

Sl. No.	Course Component	Key Learning Outcomes	Estimated size (Learning hours)	NSQF Level
1	<p>Professional Knowledge- A - Entrepreneurship</p> <ol style="list-style-type: none"> 1. Knowledge of self-confidence , attitude 2. Entrepreneurial competencies 3. Banking, insurance , financial accountancy and management 4. Legal aspects ,regulatory aspects of launching a business enterprise <p>Domain/Technical Knowledge</p> <ol style="list-style-type: none"> 5. Introduction to CCTV, Importance and scope 6. Features, components, system configuration of CCTV 7. Knowledge of wall mount, ceiling mount 8. Advanced features of auto scan camera power 9. Black light compensation, ICR Digital Zoom 10. Knowledge of focus mode, Iris mode and white balance mode. 11. Auto cruise, On screen display 12. Motion detection and other features 13. Function of screen display 14. Product specification, Part description and functions 15. Knowledge of smoke detectors and types of smoke detector 16. Knowledge of installation of smoke detector and its parts and types 17. Knowledge of Alarm system, design and sensor 18. Knowledge of Installation of Alarm system and servicing 	<ol style="list-style-type: none"> 1. Candidate is clearly able to differentiate between Wage employment, Self-employment and Entrepreneurship 2. Understand, appreciate and develop the self-confidence for embarking on self-employment / entrepreneurship. 3. Understand and internalize entrepreneurial competencies and know their importance for becoming a successful entrepreneur. 4. Trainee is able to understand the legal and regulatory aspects of launching an enterprise. 5. Trainee is able to appreciate need for continuous growth and expansion of an enterprise 6. Knows the importance Of CCTV and its scope for Self employment. 7. Understands the parts of CCTV, components and configuration. 8. Understands the mounting system of the CCTV-Wall mount and ceiling mount. 9. Knows the features of auto scan camera power. 10. Understand and confirm the monitor of hardware requirement and PC 11. Knows the type of transmission to output device, IP network or digital video recorder or remote. 12. Understands CCTV camera installation requirement in terms of equipment system, tools, and applications. 13. Knows different types of CCTV equipments and its specification 14. Understands different types of CCTV Camera and associated systems and different types of DVR and their purpose. 15. Understands the motion detection and other features. 16. Knows the function of screen display 17. Understands the feature of smoke detectors and types of smoke detector. 18. Knows how to install the smoke detector 19. Understands the Alarm systems and its design and its sensor 20. Knows the installation of Alarm system. 	<p>14 Hours (Theory)</p> <p>8 Hours</p>	<p>Level 3</p> <p>Level 3</p>

2	Professional /Technical Skills 19. Basic electrification and able to do wiring 20. Identify different types of CCTVs 21. Install the CCTV 22. Mounting of CCTV in wall or in ceiling 23. Setting of Camera and addressing 24. Setting of the focus- 25. Setting of different modes 26. Screen display configure 27. Able to identify different types of smoke detectors 28. Identify the design and sensors of the smoke designer 29. Checking ultra sonic detector and Passive infrared detector 30. Installation of Alarm system 31. Checking the working of the Alarm system.	21. Electrification and wiring the site. 22. Able to identify different types of CCTV 23. Able to mount the CCTV either wall or ceiling. 24. Is able to set the Camera and addressed 25. Able to focus the camera. 26. Able to set the different modes. 27. Able to configure the screen display. 28. Can check the working system after installation. 29. Able to maintain the CCTV and its functioning. 30. Identify optical smoke detector and ionization smoke detector 31. Identify electrical and mechanical parts of the detector 32. Demonstrate the working of the smoke detector 33. Place heat detector or smoke detector. 34. Check the entire system of working of Alarm system	62 Hours	Level 3
3	Core Skills 32. Identify business opportunities in chosen sector 33. Conduct market survey and prepare simple business plan 34. Ability to plan and assess risk 35. Problem solving capabilities 36. Time management skills 37. Communication skills 38. Business Management skills	35. Trainee is able to analyze major trends in a given economic sector / sub-sector and identify Business Opportunities 36. Trainee is able to conduct market survey and develop sound Business Plans based on obtained data. 37. Develop effective personal management skills like time management and communication skills. 38. Trainees able to devise a simple marketing and sales strategies and plan for a small business 39. Trainees able to manage small team of workers required for managing a small business	14 Hours (Practical)	Level 3
4	Admission, Evaluation Test & Valedictory		6 hours	
Total Course Duration			104 Hrs	

Installation & Servicing of CCTV Camera, Security Alarm & Smoke Detector - Detailed Syllabus

SL No	Subject	Contents	Mode of delivery	Hrs
MODULE I - Introduction to Entrepreneurship				
1	Registration & Inauguration	<ul style="list-style-type: none"> • A formal gathering • Introduction of trainers • Objectives of the programme • Rules & Regulations of the Institute 	Lecture, Video	2hrs
2	Rapport building & unfreezing – Ice breaking exercise	<ul style="list-style-type: none"> • Climate Setting & confidence building by Ice Breaking exercises • Familiarizing themselves with each other • Importance of interaction in the learning process • Psychological approach – Rising participants' consciousness • Shedding shyness, reservations, inferiority complex 	Games, Exercises, Group discussion, Skits etc	2 hrs
MODULE II - Achievement Motivation and positive psychology				
3	Achievement Motivation - Confidence building	<ul style="list-style-type: none"> • What is motive? Internal & External Motivation • Motivational Factors leading to motivation • Positive thinking • Shedding negative feelings • Experience Sharing by successful entrepreneurs • Motivational video clips • Scope for Self employment 	Lecture PPT Video	2 hrs
4	Why self-employment - Advantages over wage employment, Entrepreneurship Development	<ul style="list-style-type: none"> • Need and importance of embarking on self-employment • Advantages of self-employment vis-à-vis wage employment • Assessing self to know entrepreneurial tendencies • Process of Entrepreneurship Development • Importance of behavioral changes for entrepreneurship • Difference between Income Generating Activity, Self Employment and Entrepreneurship • Characteristics of an entrepreneur – Dynamics of Entrepreneurship • Attitude and its impact on Entrepreneurship 	Group Discussion, PPT	2 hrs
MODULE III - Entrepreneurial Competencies				
5	Entrepreneurial competencies – importance, explanation with examples, case study for identification of different competencies	<ul style="list-style-type: none"> • Defining Competencies – Combination of knowledge, skill, motive and trait • Understanding all the 15 Competencies • Relevance of entrepreneurial Competencies at different stages of enterprise launching and management • Facilitating internalizing the entrepreneurial competencies by way of stories, viewing videos etc. • Identifying entrepreneurial competencies through a case study • How success is related to Entrepreneurial Competencies 	Lecture, PPT, Group Discussion, Video Clips & Case Study	4 hrs

6	Systematic Planning & Efficiency Orientation – Boat building exercise	<ul style="list-style-type: none"> • What is quality, attributes of quality • Factors affecting quality • Quality Management • Systematic planning 	Game, Discussion, PPT, Lecture	2hrs
7	Tower Building Exercise – Eradication of Dependency Syndrome	<ul style="list-style-type: none"> • Role of Self confidence in performing any activity • Importance of planning & scanning the environment • Developing belief in own ability to complete a given task/face a challenge without depending upon external assistance 	Game, Discussion, Lecture	2 hrs
MODULE IV - Personal Skills				
8	Problem Solving & Creativity	<ul style="list-style-type: none"> • Need for developing problem solving skills • Process involved in problem solving • Importance of Creativity in Entrepreneurship 	Lecture, PPT, Video, Games	2 hrs
9	Effective Communication	<ul style="list-style-type: none"> • Importance of communication skills in running an enterprise • Elements of effective communication • Barriers of effective communication & the ways to overcome it 	Lecture, PPT, Exercise	2 hrs
MODULE V - Business Management				
10	Banking - Deposits & Advances, Lending Schemes / Government Sponsored Schemes	<ul style="list-style-type: none"> • Various Deposit Schemes and other services of banks • General Advances -Security Norms & margin requirement • Term Loan & Working Capital finance • MSME Credit • Mudra Loan • PMEGP Scheme • CGTMSE Scheme 	Lecture, PPT, Discussion	4 hrs
11	Marketing Management/Packaging/branding	<ul style="list-style-type: none"> • Indian rural market an overview • Elements of successful marketing • Market segmentation • 4 Ps of marketing • Marketing mix • Product mix • Unique Selling Proposition • Need for understanding consumer behavior and preferences • Importance of customer service • Marketing strategies for exploring opportunities in rural market • Online marketing 	Lecture, PPT, Discussion	2 hrs
12	Costing & Pricing, Fixed cost & Variable Cost, Breakeven point etc.	<ul style="list-style-type: none"> • Components of direct and indirect, fixed and variable cost • Importance of Costing in profitability • Concepts of pricing and factors affecting pricing decisions • Commercial feasibility of an enterprise • Break Even analysis 	Lecture, Discussion, PPT and Exercise	2 hrs

MODULE VI - Market Survey				
13	Market Survey – methodology, sources, nature of information to be collected	<ul style="list-style-type: none"> • Need for market survey • Methodology to collect and use the information generated • How to develop an effective survey plan for the selected activity • Dos & don'ts for conducting market survey • Questionnaire for market survey • Market survey report format 	Lecture, Group Discussion, PPT	2 hrs
MODULE VII - Business Plan Preparation				
14	Business Plan Preparation	<ul style="list-style-type: none"> • Plan format • How to ascertain initial viability of a business proposal • Enlisting technical, financial, marketing and commercial aspects of business • Profitability 	Lecture, PPT, Exercise, Discussion	2 hrs
MODULE –VIII Launching Formalities				
15	Interaction with successful entrepreneurs	<ul style="list-style-type: none"> • Identify factors responsible for the development of the entrepreneur • Assess the Entrepreneurial Competencies of the Entrepreneur • Impact of EDP training inputs • Understand how the entrepreneur reacts to a challenging situation 	Interaction followed by discussion	2hrs
16	Maintaining of records and Launching formalities	<ul style="list-style-type: none"> • Steps in launching of an enterprise, common crisis in business • Pitfall and their controls • Licensing & Registration: Formalities for obtaining Trade License from Panchayath/Municipal agencies • Formalities for obtaining PAN Card, TAN, Service Tax & VAT Registration. 	Lecture, PPT and Discussion	2hrs
Technical Knowledge and Skills				
MODULE IX – Installation & Servicing of CCTV Camera, Security Alarm & Smoke Detector				
17	Introduction to CCTV	<ul style="list-style-type: none"> • Importance and widening scope in the present scenario • Feature, components, system configuration. 	Lecture / PPT/Demonstration	04 hrs
MODULE X–Practical on Installation and working CCTV				
18	Installation CCTV	<ul style="list-style-type: none"> • Installation of CCTV • Wall Mount, ceiling mount • Camera addressing setting of camera addressing • Protocol an baud rate setting • Advance feature of auto scan, camera power • Black light compensation • ICR, Digital Zoom • Focus mode, Iris mode, white balance mode • Special function ,motion detection • Parts description and function product specification • Maintenance of CCTV 	Lecture / PPT/Demonstration	42 hrs

MODULE XI- SMOKE DETECTOR					
19	Smoke detector	<ul style="list-style-type: none"> • Smoke detector design and principal • Commercial smoke detectors • Conventional and addressable smoke detector • Electrical and Mechanical parts of smoke detector • Testing and checking of smoke detector 	Lecture / PPT/Demonstration/ Exercise	10 hrs	
MODULE XII – ALARM SYSTEM					
20	Alarm System	<ul style="list-style-type: none"> • Design and sensor type • Passive infrared detectors ultrasonic detectors • Microwave detector • Photo electric beams, glass beam detector 	Lecture / PPT/Demonstration/ Exercise	8 Hrs	
Assessment & Evaluation Test, Feedback & Valedictory				4 hrs	
				Total	104 hrs