MODEL CURRICULUM

QP Name: MACHINE OPERATOR - PLASTICS PROCESSING

NQR Code: QG-03.5-CP-04116-2025-V2-CIPET

QP Version: 2.0

NSQF Level: 3.5

Model Curriculum Version: 1

Sector: Chemicals &Petrochemicals (CPC)

Central Institute of Petrochemicals Engineering & Technology (CIPET)

Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Govt. of India

CIPET Head office, T.V.K Industrial Estate, Guindy, Chennai – 600 032.

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Training Parameters

Sector	Chemicals & Petrochemicals (CPC)
Sub-Sector	Petrochemicals
Occupation	Machine Operator - Plastics Processing
Country	India
NSQF Level	3.5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8142
Minimum Educational Qualification and Experience	

S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)
1.	11th Grade pass	No Experience required
2.	10th Grade pass	1.5 year relevant experience
3.	8th Grade pass	4.5 years relevant experience
4.	Previous relevant Qualification of NSQF Level 3	1.5 years relevant experience

Pre-Requisite License or Training	
Minimum Job Entry Age	18 Years
Last Reviewed On	
Next Review Date	
NSQC Approval Date	
QP Version	2.0
Model Curriculum Creation Date	
Model Curriculum Valid Up to Date	
Model Curriculum Version	1.0
Minimum Duration of the Course	600 Hrs.
Maximum Duration of the Course	600 Hrs.

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Familiarization with basic concepts, job requirements & basic related processes.
- Understand Plastic material, its basic characteristics & application.
- Work on Plastics Processing machinery to produce quality products.
- Operate and Troubleshoot Injection Moulding machine.
- Operate and Troubleshoot Blow Moulding machine.
- Operate and Troubleshoot Extrusion machine.
- Understand and apply various rules and Safety measures while working in the Plastics Industry.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
Module 1: CPC/N0113 - Familiarization with basic concepts, job requirements & basic related processes.	10:00	20:00	00:00	00:00	30:00
Module 2: CPC/N0114 - To know about different plastic material	20:00	40:00	00:00	00:00	60:00
Module 3: CPC/N0115 - Familiarized with various Plastics processing techniques & to assist the Operator in Injection Moulding& its Troubleshooting	50:00	100:00	00:00	00:00	150:00
Module 4: CPC/N0116 -Familiarized with various Plastics processing techniques & to assist the Operator in Extrusion & its Troubleshooting	40:00	80:00	00:00	00:00	120:00
Module 5: CPC/N0117 - Familiarized with various Plastics processing techniques & to assist the Operator in Blow Moulding& its Troubleshooting etc.	40:00	80:00	00:00	00:00	120:00
Module 6: CPC/N0411 - Maintain basic health and safety practices at the workplace,5S.	10:00	20:00	00:00	00:00	30:00
Module 7: CPC/N0219 - Basics of MS Office / Open Source office suite software	10:00	20:00	00:00	00:00	30:00
Module 8: DGT/VSQ/N0101 - Employability Skills	30:00	00:00	00:00	00:00	30:00
Module 9: On the Job Training (OJT)	00:00	00:00	30:00	00:00	30:00
Total Duration	**210:00**	**360:00**	**30:00**	**00:00**	600:00

Module Details

Module 1: CPC/N0113 - Familiarization with basic concepts, job requirements & basic related processes

Mapped to:

Terminal Outcomes:

- To study & understanding of Safety and General precautions observed in plastic processing workshops.
- To study basic knowledge of Safety procedures (fire- fighting, first aid) within the organization.
- To study various types of PPEs and their usage in the Plastic industry.
- To understand risks/hazards associated with each occupation in the organization.
- To study personal hygiene and the importance of a safe and clean working environment.
- To understand and obey the rules and guidelines appropriate to the general populace or specific jobs.
- Develop and implement safe work procedures and rules.

Duration: *10:00 Hours*	**Duration**: *20:00 Hours*
Theory–Key Learning Outcomes	**Practical–Key Learning Outcomes**
• Study understanding of Safety and General precautions observed in plastic processing Workshop and its procedures. • Use of PPE. • Study of PPE and its upkeep. • Risks and Hazards. • Study the importance of personal hygiene, Clean working Environment.	• Identify and explain the importance of safety protocols in a plastics processing workshop. • Describe the procedures for reporting incidents, accidents, and near-misses. • Demonstrate knowledge of emergency response procedures, such as evacuation routes and fire extinguisher usage. • Explain the importance of following standard operating procedures (SOPs) in the workshop. • Identify the types of PPE required for plastics processing operations. • Demonstrate the proper use and maintenance of PPE. • Recognize situations where PPE is required. • Apply PPE usage in a practical scenario. • Explain the importance of regular PPE inspections and maintenance. • Describe the procedures for cleaning, storing, and disposing of PPE. • Demonstrate how to properly don and doff PPE. • Identify the limitations and expiration dates of PPE. • Identify potential hazards in the plastics processing workshop, such as chemical spills, electrical hazards, and equipment malfunctions.

	• Explain the risks associated with plastics processing operations, such as burns, cuts, and respiratory problems. • Demonstrate knowledge of hazard control measures, such as lockout/tagout procedures and machine guarding. • Apply risk assessment and hazard control principles in a practical scenario. • Explain the importance of personal hygiene practices, such as hand washing and proper attire. • Describe the procedures for maintaining a clean and organized working environment. • Demonstrate knowledge of proper waste disposal and recycling practices. • Apply personal hygiene and clean working environment principles in a practical scenario.
• Classroom Aids:	
LCD Projector, White Board with marker and duster, charts, Pen drives, computers etc for conduct of class.	
Tools, Equipment and Other Requirements	
Safety Goggles, Rubber Gloves, Asbestos gloves, Fire Extinguisher, Apron, Helmet, First Aid Box with Medicines etc.	

Module 2: CPC/N0114 - To know about different plastic material

Mapped to:

Terminal Outcomes:

- Introduction to polymers.
- Study of fundamental terminology of polymers.
- Classification of polymers, polymer structure and morphology, etc.

Duration: *20:00 Hours*	**Duration**: *40:00 Hours*
Theory–Key Learning Outcomes	**Practical–Key Learning Outcomes**
• Basics about Polymers, its type, characteristics, Melting point, processing parameters etc. • Nomenclature of plastics, types, grades etc. • Classification of polymers, polymer structure, characteristics and its effect on plastics.	• Define what polymers are and their importance in plastics processing. • Explain the different types of polymers, such as thermoplastics, thermosets, and elastomers. • Describe the characteristics of polymers, including melting point, glass transition temperature, and crystallinity. • Identify the common processing parameters for polymers, such as temperature, pressure, and cooling rate. • Explain the system of nomenclature used to identify different types of plastics. • Identify the different types of plastics, including commodity plastics, engineering plastics, and specialty plastics. • Describe the different grades of plastics, including virgin, regrind, and recycled materials. • Explain the different methods of classifying polymers, including molecular structure, thermal properties, and mechanical properties. • Describe the different types of polymer structures, including linear, branched, and cross-linked. • Identify the characteristics of polymers that affect their properties and behavior, including molecular weight, crystallinity, and additives. • Explain how the characteristics of polymers affect the properties and behavior of plastics, including their strength, stiffness, and thermal stability.
-Classroom Aids:	
LCD Projector, White Board with marker and duster, charts, Pen drives, computers etc for conduct of class.	
Tools, Equipment and Other Requirements	
Plastics raw material like PP, HDPE, etc for training on machines of injection, Blow and Extrusion grade from good/reputed suppliers.	

Module 3: CPC/N0115 - Familiarized with various Plastics processing techniques & to assist the Operator in Injection Moulding& its Troubleshooting

Mapped to:

Terminal Outcomes:

- Understand the principles and physical operations of the Plastic injection molding process.
- Study Effect of polymer property on process techniques-process variables & its effects.
- Basic parts and function, clamping mechanism, ejector mechanism, Injection mechanism.
- Study of process parameters, plastics material for injection moulding.
- Study of mould and product design, Product defects and troubleshooting.
- Machine start up and shut down procedure, process documentation.
- Study of microprocessor based injection moulding machines, fully Electric Injection moulding, Servo Hydraulic machines.

Duration: *50:00 Hours*	**Duration**: *100:00 Hours*
Theory–Key Learning Outcomes	**Practical–Key Learning Outcomes**
• Basic machine parts and its function, clamping mechanism, ejector mechanism, Injection mechanism and its type. • To study process parameters in injection moulding , plastics material used in injection, its types, processing parameters setting etc. • Study of mould used in Injection moulding, types of product and effect on process, Product defects and troubleshooting with different defects like short Shot, Flash etc. • Machine start up and shut down procedure, process documentation. • Study of microprocessor based injection moulding machines, its effect on process and product output, fully Electric Injection moulding& Servo Hydraulic machines currently used in Plastics industry.	• Basic Machine Parts and Functions • Identify and explain the function of basic machine parts, including: Clamping mechanism, Ejector mechanism, Injection mechanism, Demonstrate the proper and operation of each machine part. • Explain the different types of injection mechanisms, including reciprocating screw and two-stage injection. • Process Parameters in Injection Moulding • Set and adjust process parameters, including: Temperature Pressure Injection speed Cooling time • Explain the effect of process parameters on product quality. • Demonstrate how to optimize process parameters for different plastics materials. • Plastics Materials and Moulds • Identify and explain the types of plastics materials used in injection moulding, including thermoplastics and thermosets. • Demonstrate how to handle and prepare moulds for injection moulding. • Explain the effect of mould design on product quality. • Product Defects and Troubleshooting • Identify and explain common product defects, including short shot, flash, and sink marks. • Demonstrate troubleshooting techniques for different defects. • Explain the importance of quality control in injection moulding. • Machine Operation and Documentation • Demonstrate the proper start-up and shut-down procedure for injection moulding machines. • Explain the importance of process documentation, including recording process parameters and monitoring product quality. • Demonstrate how to complete process documentation accurately. • Advanced Injection Moulding Technologies • Explain the principles of microprocessor-based injection moulding machines. • Demonstrate the operation of fully electric injection moulding machines and servo hydraulic machines. • Explain the benefits and limitations of advanced injection moulding technologies.
Classroom Aids:	
LCD Projector, White Board with marker and duster, charts, Pen drives, computers etc for conduct of class.	
Tools, Equipment and Other Requirements	
Basics machines for training like hand injection moulding, semi automatic injection moulding, Automatic injection moulding and moulds etc.	

Module 4: CPC/N0116 -Familiarized with various Plastics processing techniques & to assist the Operator in Extrusion & its Troubleshooting

Mapped to:

Terminal Outcomes:

- Fundamental of Extrusion.
- Classification of Extruders, nomenclature of screws.
- Study of different types of screws, drive mechanism, die design, etc.
- Process parameters, difference between SSE and TSE etc.
- Study of types of Extrusion process-Pipe, Film & profile extrusion, troubleshooting.

Duration: *40:00 Hours*	**Duration**: *80:00 Hours*
Theory–Key Learning Outcomes	**Practical–Key Learning Outcomes**
• Basics of extrusion process for Plastics, types based on raw material used, output etc. • Types of Extruders, twin screw/ single screw, nomenclature of screws- Flights, land etc. • To study different types of screws used in plastics processing machinery, drive mechanism, basics of die design and its effect on product performance, etc. • To study the Process parameters like time, temperature speed etc in process, difference between SSE and TSE and importance in plastics material processing. • Study of types of Extrusion process-Pipe, Film & sheet extrusion, process parameters, raw material used, trouble shooting in these processes.	• Basics of Extrusion Process • Demonstrate an understanding of the extrusion process, including the feeding, melting, and forming of plastics materials. • Identify and explain the different types of extrusion processes based on raw material used, output, and applications. • Operate an extruder to produce a simple product, such as a plastic rod or tube. • Types of Extruders • Identify and explain the differences between single-screw and twin-screw extruders. • Demonstrate an understanding of the nomenclature of screws, including flights, land, and pitch. • Operate a single-screw and twin-screw extruder to compare their performance. • Screw Design and Die Design • Identify and explain different types of screws used in plastics processing machinery, including their design and applications. • Demonstrate an understanding of the drive mechanism of extruders, including electric and hydraulic drives. • Design and fabricate a simple die to produce a plastic product. • Process Parameters • Set and adjust process parameters, including time, temperature, speed, and pressure, to optimize the

	extrusion process. • Demonstrate an understanding of the difference between single-screw extruders (SSE) and twin-screw extruders (TSE) and their importance in plastics material processing. • Monitor and control process parameters to maintain product quality. • Types of Extrusion Processes • Operate a pipe extrusion line to produce a plastic pipe. • Operate a film and sheet extrusion line to produce a plastic film or sheet. • Troubleshoot common problems in pipe, film, and sheet extrusion, including surging, melt fracture, and die lip buildup. • Troubleshooting • Identify and explain common problems in extrusion, including surging, melt fracture, and die lip buildup. • Demonstrate troubleshooting techniques for extrusion problems, including adjustments to process parameters and equipment maintenance. • Develop a preventive maintenance schedule to minimize downtime and maintain equipment performance.
Classroom Aids:	
LCD Projector, White Board with marker and duster, charts, Pen drives, computers etc for conduct of class.	
Tools, Equipment and Other Requirements	
Extrusion machines like Blow film, Pipe extruder & dies etc.	

Module 5: CPC/N0117 - Familiarized with various Plastics processing techniques & to assist the Operator in Blow Moulding& its Troubleshooting etc.

Mapped to:

Terminal Outcomes:

- Study of Principle of blow moulding, types of blow moulding, machines parts and construction.
- Study of Plastics materials used, construction of dies assembly.
- Moulds used in blow moulding.
- Process parameters setting etc.
- Study of basics of parison programming Troubleshooting.

Duration: *40:00 Hours*	**Duration**: *80:00 Hours*
Theory–Key Learning Outcomes	**Practical–Key Learning Outcomes**
• To study Principle of blow moulding, types of blow moulding like extrusion, Stretch, injection blow etc. , to study machine construction, parts etc. • Study of Plastics materials used in blow moulding, grades, basics of dies and its assembly techniques to produce good quality products. • Study of Moulds used in blow moulding- types, material of construction, basic design etc. • To study the Process parameters like time, temperature speed etc in process and setting of the same. • Study of basics of parison programming, machinery used, process parameters setting, Troubleshooting etc.	• Blow Moulding Principles and Types • Demonstrate an understanding of the principle of blow moulding and its applications. • Identify and explain different types of blow moulding, including extrusion blow moulding, stretch blow moulding, and injection blow moulding. • Operate a blow moulding machine to produce a simple product, such as a plastic bottle. • Plastics Materials and Dies • Identify and explain the types of plastics materials used in blow moulding, including grades and properties. • Demonstrate an understanding of the basics of dies and their assembly techniques to produce good quality products. • Assemble and disassemble a die to demonstrate understanding of its components and functionality. • Moulds Used in Blow Moulding • Identify and explain the types of moulds used in blow moulding, including material of construction and basic design. • Demonstrate an understanding of the importance of mould design and construction in producing high-quality products. • Inspect and maintain a mould to demonstrate understanding of its care and maintenance. • Process Parameters

	• Set and adjust process parameters, including time, temperature, and speed, to optimize blow moulding process. • Demonstrate an understanding of the importance of process control in producing high-quality products. • Monitor and control process parameters to maintain product quality. • Parison Programming • Demonstrate an understanding of the basics of parison programming, including machinery used and process parameters setting. • Program and operate a parison programming system to produce a simple product. • Troubleshoot common problems in parison programming, including parison sag and uneven wall thickness. • Troubleshooting • Identify and explain common problems in blow moulding, including uneven wall thickness, sink marks, and flash. • Demonstrate troubleshooting techniques for blow moulding problems, including adjustments to process parameters and equipment maintenance. • Develop a preventive maintenance schedule to minimize downtime and maintain equipment performance.
Classroom Aids:	
LCD Projector, White Board with marker and duster, charts, Pen drives, computers etc for conduct of class.	
Tools, Equipment and Other Requirements	
Hand blow, semi automatic and automatic blow moulding machines and moulds etc.	

Module 6: CPC/N0411- Maintain basic health and safety practices at the workplace, 5S.

Mapped to:

Terminal Outcomes:

- Health and safety procedure.
- Fire safety procedure.
- Emergencies, rescue and first aid procedures.
- Ensure sorting, stream lining, storage and documentation, cleaning, standardization and sustenance across the plant premises of the organization.

Duration: *10:00 Hours*	**Duration**: *20:00 Hours*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Wear protective clothing/equipment for specific tasks and work conditions • Carry out safe working practices while dealing with hazards to ensure the safety of self and others. • Apply good housekeeping practices at all times • Demonstrate rescue techniques applied during fire hazard, demonstrate good housekeeping in order to prevent fire hazards, demonstrate the correct use of a fire extinguisher • Carry out safe working practices while dealing with hazards to ensure the safety of self and others • Demonstrate rescue techniques applied during fire hazard, demonstrate good housekeeping in order to prevent fire hazards, demonstrate the correct use of a fire extinguisher. • Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals, loud noise, and Identify areas in the plant which are potentially hazardous/unhygienic in nature. Conduct regular checks with support of the maintenance team on machine health to identify potential hazards due to wear and tear of machine. • Follow the sorting process and check that the tools, fixtures & jigs that are lying on workstations are the ones in use and un-necessary items are not cluttering the workbenches or work surfaces.	• Carry out safe working practices while dealing with hazards to ensure the safety of self and others. • Apply good housekeeping practices at all times • Use the various appropriate fire extinguishers on different types of fires correctly • Demonstrate rescue techniques applied during fire hazard, demonstrate good housekeeping in order to prevent fire hazards, demonstrate the correct use of a fire extinguisher. • Identify activities which can cause potential injury through sharp objects, burns, fall, electricity, gas leakages, radiation, poisonous fumes, chemicals, loud noise, and Identify areas in the plant which are potentially Hazardous/ unhygienic in nature. • Conduct regular checks with support of the maintenance team on machine health to identify potential hazards due to wear and tear of machine. • Create awareness amongst other by sharing information on the identified risks. • Ensure segregation of waste in hazardous/ non Hazardous waste as per the sorting work instructions • Follow the technique of waste disposal and waste storage in the proper bins as per SOP • Segregate the items which are labeled as red tag items for the process area and keep them in the correct places • Follow the floor markings/ area markings used for demarcating the various sections in the plant as per the prescribed instructions and standards. • Check that the items in the respective areas have been identified as broken or damaged • Make sure that all material and tools are stored in the designated places and in the manner indicated in the 5S instructions.

Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster	
Tools, Equipment and Other Requirements	
Safety PPE's like apron, goggles, gloves, safety shoes etc.	

Module 7: CPC/N0219 Basics of MS Office / Open Source office suite software

Mapped to:

Terminal Outcomes:

- Enter, update and maintain data in the MS Office / Open Source office suite software.

Duration: *10:00 Hours*	**Duration**: *20:00 Hours*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Fill and process mandated forms for receiving, processing, or tracking data, enter data from source documents (such as trial report, process sheet etc.) into Computer applications having MS OFFICE / open source office suites software. • Scan source documents in accordance with specific instructions. • Maintain files of source documents or other information related to data entered. • Update database information to reflect most current source information	• Filling and processing mandated forms for receiving, processing, or tracking data enter data from source documents (such as trial report, process sheet etc.) into Computer applications having MS OFFICE/ open source office suite software. • Scanning source documents in accordance with specific instructions. • verify data entered with source documents, checks for compliance and corrects all typographical errors and missing or repeated data. • Maintain files of source documents or other information related to data entered. • update database information to reflect most current source information • Assist in the filing and storage of security and back up data files
Classroom Aids:	
Charts, Models, Video presentation, Flip Chart, White-Board/Smart Board, Marker, Duster	
Tools, Equipment and Other Requirements	
Computer with MS-Office / Open Source software, UPS, Table Chair etc.	

Module 8: Employability Skills

Mapped to: DGT/VSQ/N0101: Employability Skills

Mandatory Duration: *30:00 Hours*			
Location: Training Centre			
S. No.	**Module Name**	**Key Learning Outcomes**	**Duration (hours)**
1.	Introduction to Employability Skills	• Discuss the importance of Employability Skills in meeting the job requirements.	1
2.	Constitutional values - Citizenship	• Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen. • Show how to practice different environmentally sustainable practices.	1
3.	Becoming a Professional in the 21st Century	• Discuss 21st century skills. • Display positive attitude, self -motivation, problem solving, time management skills and continuous learning mindset in different situations.	1
4.	Basic English Skills	• Use appropriate basic English sentences/phrases while speaking.	2
5.	Communication Skills	• Demonstrate how to communicate in a well -mannered way with others. • Demonstrate working with others in a team.	4
6.	Diversity & Inclusion	• Show how to conduct oneself appropriately with all genders and PwD. • Discuss the significance of reporting sexual harassment issues in time.	1
7.	Financial and Legal Literacy	• Discuss the significance of using financial products and services safely and securely. • Explain the importance of managing expenses, income, and savings. • Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws.	4
8.	Essential Digital Skills	• Show how to operate digital devices and use the associated applications and features, safely and securely. • Discuss the significance of using the internet for browsing, accessing social media platforms, safely and securely.	3
9.	Entrepreneurship	• Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges.	7
10.	Customer Service	• Differentiate between types of customers. • Explain the significance of identifying customer needs and addressing them. • Discuss the significance of maintaining hygiene and dressing appropriately.	4
11	Getting ready for apprenticeship & Jobs	• Create biodata. • Use various sources to search and apply for jobs. • Discuss the significance of dressing up neatly and maintaining hygiene for an interview. • Discuss how to search and register for apprenticeship opportunities.	2

LIST OF TOOLS & EQUIPMENT FOR EMPLOYABILITY SKILLS		
S.No.	**Name of the Equipment**	**Quantity**
1.	Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed) (all software should either be latest version or one/two version below)	As required
2.	UPS	As required
3.	Multi-function Printer	As required
4.	Computer Tables	As required
5.	Computer Chairs	As required
6.	LCD Projector	As required
7.	Whiteboard	As required
Note: Above Tools & Equipment not required, if Computer Lab is available in the institute.		

Module 9: On-the-Job Training

Mandatory Duration: *30:00 Hours*
Module Name: On-the-Job Training
Location: On Site
Terminal Outcomes ● On-the-Job Training (OJT) is a hands-on learning method where participants acquire skills and knowledge while performing their job tasks. ● Participants learn specific job-related skills that are directly applicable to their roles. ● Industrial training often leads to participants becoming more effective and efficient in their learning. ● Industrial training experience builds the confidence level of participants. ● Training occurs in the actual work environment, reducing the need for induction training programs while joining in industry. ● Interaction with industry captains or mentors during training strengthens learning teamwork and workplace relationships. ● Trainees become familiar with the industrial tools, systems, and workflows quickly. ● Participants encounter and address challenges in industry, developing critical thinking and adaptability.

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
Diploma	Plastics / Polymer Engineering / Technology	2	Plastics Processing Industry	-	-	-
B.E. / B.Tech. / M.Sc.	Plastics / Polymer Engineering / Science	-	-	-	-	-

Trainer Certification	
Domain Certification	**Platform Certification**
Minimum Educational Qualification as above, additionally he/ she should have done a job role relevant skill training course from CIPET.	Recommended that the Trainer Should have done a job role relevant upskilling course from CIPET.

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training/Assessment Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
Diploma	Plastics / Polymer Engineering / Technology	2	Plastics Processing Industry	3	Plastics / Polymer Engineering / Technology	-
B.E. / B.Tech.	Plastics / Polymer Engineering	1	Plastics Processing Industry	1	Plastics / Polymer Engineering	-

Assessor Certification	
Domain Certification	**Platform Certification**
Minimum Educational Qualification as above, additionally he/ she should have done a job role relevant skill training course from CIPET.	Recommended that the Trainer Should have done a job role relevant upskilling course from CIPET.

Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

Mention the detailed assessment strategy in the provided template.

1. Assessment System Overview:
    - Batches are assigned to Training Assessment Wing (TAW), CIPET HO for planning of assessment
    - Training Centers request TAW for Assessment and Certification of Trainees
    - TAW identifies suitable assessor and nominates the assessor to the respective Training Centre
    - TAW monitors the assessment process
    - Training Centers maintain necessary records

2. Testing Environment:
    - Check the Assessment location, date and time
    - If the batch size is more than 30, then there should be 02 Assessors in a day (or) 01 Assessor in 2 days
    - Check that the allotted time to the candidates to complete the Theory & Practical Assessment

3. Assessment Quality Assurance levels/Framework:
    - Question bank / Question Paper is prepared by the Subject Matter Experts (SME) / Assessor
    - Questions are mapped to the specified assessment criteria
    - Certified Assessor & Trainer will be engaged in the process

4. Types of evidence or evidence-gathering protocol:
    - Date / Time recorded for the reporting of the assessor from assessment location
    - Assessment batch - Group Photo of Trainees along with Assessor

5. Method of verification or validation:
    - Surprise visit to the assessment location
    - Virtual meet with the Assessor / Trainees

6. Method for assessment documentation, archiving, and access
    - Hard copies of the documents are stored, soft copies of assessment evidences are stored in Email for future correspondence

References

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform a similar/ related set of functions in an industry.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualification pack code.

Acronyms and Abbreviations

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
OJT	On-the-Job Training
PwD	People with Disability PPE Personal Protective Equipment ES Employability Skills
PPE	Personal Protective Equipment
ES	Employability Skills