

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR TEXTILE SECTOR

**What are**

**Occupational**

**Standards(OS)?**

* OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
* OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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**Sector:** TEXTILE

**SUB-SECTOR:** PROCESSING

**OCCUPATION: Finishing**

**REFERENCE ID: TSC/Q 3901**

**ALIGNED TO: NCO-2004 / 8264.81**

**Brief Job Description:** A Stenter Machine Operator is responsible to do the specified job of drying, heat setting and finishing of fabric with proper control of parameters to get the desired effect.This job requires the individual to have thorough knowledge of process flow and material flow in a processing mill for fabric production and should know the important functions and operations of a Stenter machine.

**Personal Attributes:** A Stenter Machine Operator should have good eyesight, matching skills and vision. He/she should also have good interpersonal skills.

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**Introduction**

**Qualifications Pack – Stenter Machine Operator**

**Sector: Information technology- INFORMATION TECHNOLOGY enabled SERVICES (IT-ITeS)ces Helpdesk Attendant**

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| --- | --- | --- | --- | --- |
| Job Details | **Qualifications Pack Code** | **TSC/ Q 3901** | | |
| **Job Role** | **Stenter Machine Operator** | | |
| **Credits (NSQF)** | **TBD** | **Version number** | **1.0** |
| **Sector** | **Textile** | **Drafted on** | **15/12/15** |
| **Sub-sector** | **Processing** | **Last reviewed on** | **25/02/15** |
| **Occupation** | **Finishing** | **Next review date** | **01/03/16** |

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| **Job Role** | **StenterMachine Operator** |
| **Role Description** | To carry out the process of drying, heat setting and finishing of fabric using a Stenter Machine, as specified under Job Order |
| **NSQF level**  **Minimum Educational Qualifications**  **Maximum Educational Qualifications** | 4 |
| 10th standard, preferably  N/A |
| **Training**  (Suggested but not mandatory) | Three to six months of training in textile processing. |
| **Experience** | Preferably 2-3 years in textile processing |
| **National Occupational Standards (NOS)** | **Compulsory:**   1. TSC/N3901 Taking charge of shift and handing over shift to operator 2. TSC/N3902 [Operating theStenterMachine](#_This_unit_is) 3. TSC/N3903 [Preparing the finishing chemicals](#_This_unit_is_1) 4. TSC/ N9001 Maintain work area,tools and machines 5. TSC/ N9002 Working in a team 6. TSC/ N9003 Maintain health, safety and security at workplace 7. TSC/ N9004 Comply with industry and organizational requirement   **Optional:**  Not Applicable |
| **Performance Criteria** | As described in the relevant OS units |

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| Definitions | **Keywords /Terms** | **Description** |
| Sector | Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined asa 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. |
| Vertical | Vertical may exist within a sub-sector representing different domain areas  or the client industries served by the industry. |
| Occupation | Occupation is a set of job roles, which perform similar/related set of functions in an industry. |
| Function | Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS. |
| Sub-functions | Sub-functions are sub-activities essential to fulfill the achieving the objectives of the function. |
| Job role | Job role defines a unique set of functions that together form a unique employment opportunity in an organization. |
| Occupational Standards (OS) | OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts. |
| Performance Criteria | Performance Criteria are statements that together specify the standard of performance required when carrying out a task. |
| National Occupational Standards (NOS) | NOS are Occupational Standards which apply uniquely in the Indian context. |
| Qualifications Pack Code | Qualifications Pack Code is a unique reference code that identifies a qualifications pack. |
| Qualifications Pack(QP) | Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code. |
| Unit Code | Unit Code is a unique identifier for an OS unit, which can be denoted with either an ‘**O**’ or an ‘**N**’. |
| Unit Title | Unit Title gives a clear overall statement about what the incumbent should be able to do. |
| Description | Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for. |
| Scope | Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required. |
| Knowledge and Understanding | Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard. |
| Organizational Context | Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility. |
| Technical Knowledge | Technical Knowledge is the specific knowledge  needed to accomplish specific designated responsibilities. |
| Core Skills/Generic Skills | Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS , these include communication related skills that are applicable to most job roles. |
| Helpdesk | Helpdesk is an entity to which the customers will report their IT problems. IT Service Helpdesk Attendant is responsible for managing the helpdesk. |
| **Acronyms** | **Keywords /Terms** | **Description** |
| SSC | Sector Skill Council |
| OS | Occupational Standard(s) |
| NOS | National Occupational Standard(s) |
| QP | Qualifications Pack |
| NSQF | National Skill Qualifications Framework |
| NCO | National Classifications of Occupation |
| TBD | To Be Determined |
| TSC | Tectile Sector Skill Council |
| NSDC | National Skill Development Corporation |

**National Occupational Standard**

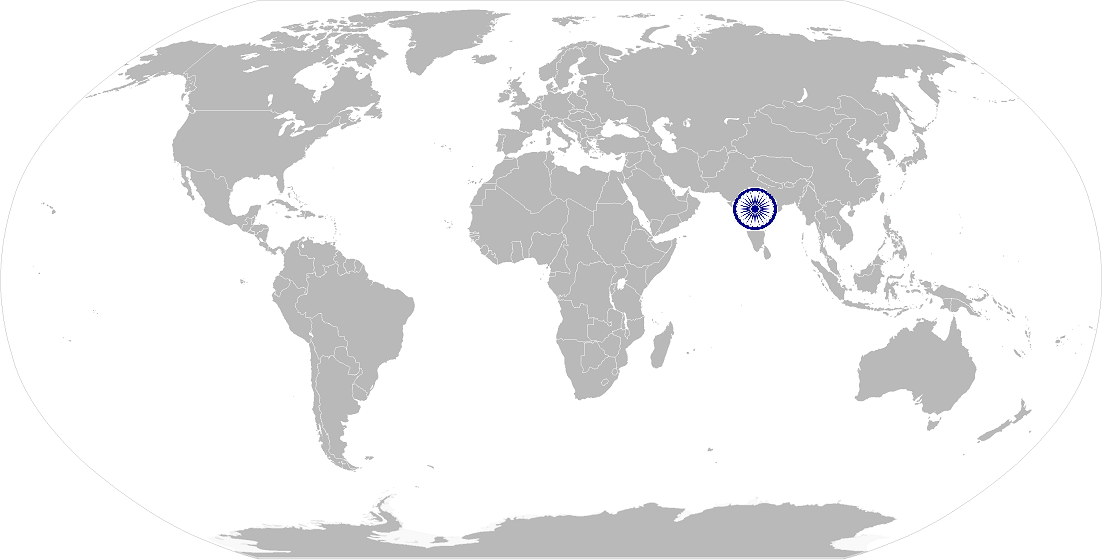
**Overview**

# This unit is about taking charge of shift and handing over shift to operator

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| Unit Code National Occupational Standard | TSC/N 3901 |
| **Unit Title**  **(Task)** | Taking charge of shift and handing over shift to operator |
| **Description** | This unit is about taking charge of shift from previous shift operator and relieving the responsibilities to the next shift operator |
| Scope | **This unit/task covers the following:**   * to take charge of shift from previous shift operator * to hand over the shift to next shift operator |
| **Elements** | **Performance Criteria** |
| Taking charge of shift | To be competent, you must be able to:   1. come at least 10 - 15 minutes earlier to the work place 2. bring the necessary operational tools to the department 3. meet the previous shift operator and discuss with him/ her regarding the issues faced by them with respect to the quality or production or spare or safety or any other specific instruction etc. 4. understand the fabric being processed & process running on the machine 5. ensure the technical details are mentioned on the job card display on the machine 6. check for the availability of the spare trolley for unloading the fabric 7. check the next batch to be processed is ready near the machine 8. ensure the required dyes & chemicals are already weighed & prepared 9. check the cleanliness of the machines & other work areas 10. question the previous shift operator for any deviation in the above and bring the same to the knowledge of his/ her shift superior as well that of the previous shift as well. |
| Handing over shift | To be competent, you must be able to:   1. hand over the shift to the incoming operator in a proper manner 2. ensure in providing the details regarding fabric quality & the process running on the machine 3. to provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine. 4. ensure the empty trolley is near the machine for unloading the fabric 5. ensure the next lot to be processed is ready near the machine already stitched & arranged properly 6. ensure the required dyes & chemicals for the next lot or next process are weighed & prepared 7. get clearance from the incoming counterpart before leaving the work spot 8. report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift 9. ensure the shift has to be properly handed over to the incoming shift operator 10. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and should leave the department only after getting concurrence for the same from his/ her superiors 11. collect the wastes from waste collection bags, weigh them and transport to storage area 12. ensure the machine and its work place is clean |
| **Knowledge and Understanding (K)** | |
| 1. **Technical Knowledge** | You need to know and understand:   1. the importance of quality & productivity 2. various defects in the fabric due to yarn, weaving or processing 3. reasons for various defects in the fabric due to processing & their remedy 4. process flow in a processing unit 5. material flow in a processing unit 6. functions of various controls of the machine 7. importance of material handling and types of material handling equipment being used 8. importance of cleanliness at workplace 9. functions and methodology for operating different material handling equipment 10. the functions of various alarm signals 11. guidelines for operating the machine 12. guidelines for taking charge of shift from previous shift operator 13. guidelines for handing over the shift to the next shift operator 14. safety procedures to be followed while operating the machine |
| **Skills (S)** | |
| 1. **Core Skills/ Generic Skills** | **Writing Skills** |
| You need to know and understand how to:   1. write in basic language |
| **Reading Skills** |
| You need to know and understand how to:   1. comprehend written instructions |
| **Oral Communication (Listening and Speaking skills)** |
| You need to know and understand how to:   1. communicate with supervisor appropriately 2. talk to others to convey information effectively |
| 1. **Professional Skills** | **Problem Solving** |
| You need to know and understand how to:   1. apply problem-solving approaches in different situations 2. refer anomalies to the supervisor 3. seek clarification on problems from others |
| **Attention to Detail** |
| You need to know and understand how to:   1. apply good attention to detail 2. check your work is complete and free from errors |
| 1. **Technical Skills** | You need to know and understand how to:   1. operate the machine 2. operate various valve & traps 3. operate different material handling tools and equipment 4. check the quality of processed fabric 5. maintain cleanliness at work place |

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| **NOS Code** | **TSC/N 3901** | | |
| **Credits (NSQF)**  **[*OPTIONAL*]** | **TBD** | **Version number** | **1.0** |
| **Industry** | **Textile** | **Drafted on** | **15/12/15** |
| **Industry Sub-sector** | **Processing** | **Last reviewed on** | **25/02/15** |
| **Occupation** | **Finishing** | **Next review date** | **01/03/16** |

**NOS Version Control**



**National Occupational Standard**

**Overview**

# This unit is about operating the Stenter Machine

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| **nit Code** | **TSC/N3902** |
| **Unit Title**  National Occupational Standard  **(Task)** | Operating the Folding Machine |
| **Description** | This unit is about operating the StenterMachine |
| Scope | **This unit/task covers the following:**   * carry out preparatory activities in the machine * operate the machine for the specified task as per work order * clean the machine & carryout preventive maintenance |
| **Performance Criteria (PC) w.r.t. the Scope** | |
| **Elements** | **Performance Criteria** |
| Carry out preparatory activities for operations in the machine | To be competent, you must be able to:   1. ensure that the machine is clean 2. feed the fabric from the batch or trolley in the center of the machine 3. ensure fabric is crease-less and evenly fed into the machine |
| Operate the machine for specified tasks as per Work Order | 1. know the operations of the machine 2. read & understand the process being followed to do the task 3. set the width maximum and minimum once a day keep even tension on fabric throughout the process 4. keep optimum pressure of the squeezer rolls to get specified results 5. set the required temp & fan speeds in all chambers 6. feed the fabric to the stenter chain 7. adjust the overfeed device as per the requirement of the fabric 8. start the machine & take out the fabric at the delivery end 9. check various control parameters such as temp, width, mangle pressure & machine speed at regular interval |
| Clean the machine on a regular basis and carryout preventive maintenance activities | 1. make sure the machine is kept clean at all times ,before loading, while running & after unloading the fabric 2. follow the preventive maintenance schedule & ensure the machine is running smoothly 3. check that all controls are functioning properly 4. ensure the right quality of water , steam & air is availablefor proper functioning of machine 5. cool down the machine after completion of job |
| **Knowledge and Understanding (K)** | |
| 1. **Organizational Context** (Knowledge of the company/ organization and its processes) | You need to know and understand:   1. general rules and regulations in processing unit 2. procedure followed to get the final output in processing unit 3. safe working practices to be adopted in processing unit 4. how to report to the supervisor or higher authority about any grievances faced |
| 1. **Technical Knowledge** | You need to know and understand:   1. importance of discipline & punctuality 2. importance of take over & handover in achieving quality & productivity 3. any abnormal sound/ noise should be reported to the concerned/ supervisor 4. type of fiber, yarn and fabric- yarn dyed, piece dyed or printed 5. knowledge about various controls of machine 6. knowledge about required finished widths of different qualities 7. avoiding unnecessary tension on the fabric 8. moisture contents in the dried / finished fabric 9. threading the fabric to pin or clip stenter 10. knowledge about the shrinkage in the finished fabric 11. knowledge about required optimum mangle pressure for drying & finishing processes 12. knowledge about various functions of stenter machine 13. knowledge about required optimum mangle pressure for drying & finishing processes 14. basic knowledge about drying, heat setting & finishing temp of various products 15. knowledge & use of overfeed device to achieve the specified task 16. basic knowledge about moisture contents in the dried or finished fabric for optimum production 17. wrapping the fabric evenly on the batching device roll or threading it into the trolley |
| **Skills (S)** | |
|  | **Reading Skills** |
| You need to know and understand how to:   1. read and comprehend written instructions 2. read any application sent by other colleagues |
| **Oral Communication (Listening and Speaking skills)** |
| You need to know and understand how to:   1. communicate with supervisor appropriately 2. talk to others to convey information effectively |
| 1. **Professional Skills** | **Problem Solving** |
| You need to know and understand how to:   1. identify the real reason of problem faced 2. apply problem-solving approaches in different situations 3. refer anomalies to the supervisor 4. seek clarification on problems from others |
| **Attention to Detail** |
| You need to know and understand how to:   1. apply good attention to detail 2. check your work is complete and free from errors 3. make sure every kind of communication is error free |
| 1. **Technical Skills** | You need to know and understand :   1. know the various faults due to yarn, weaving, dyeing, printing and finishing in the fabric 2. quality/ sort no 3. width of fabric 4. length &weight 5. use the correct tools for cleaning the machine 6. use of edge guide sensors for even & straight feeding of fabric to the machine 7. proper use of guide rolls & control sensors 8. basic operation of various types of stenter machines viz. pin, clip etc 9. understanding of various operations carried out on stenter machine viz; drying, heat setting, finishing etc 10. operation of various controls of machine 11. proper use of tensioning devices to get even width & required shrinkage in the fabric |

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| **NOS Code** | **TSC/N 3902** | | |
| **Credits (NSQF)**  **[*OPTIONAL*]** | **TBD** | **Version number** | **1.0** |
| **Industry** | **Textile** | **Drafted on** | **15/12/15** |
| **Industry Sub-sector** | **Processing** | **Last reviewed on** | **25/02/15** |
| **Occupation** | **Finishing** | **Next review date** | **01/03/16** |

**National Occupational Standard**

**Overview**

**This unit is about preparing the finishing chemical**

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| **Unit Code**  National Occupational Standard | **TSC/N 3903** |
| **Unit Title**  **(Task)** | Recording the finishing chemicals |
| **Description** | This unit is about preparing the finishing chemicals |
| Scope | **This unit/task covers the following:**   * dissolving and mixing the chemicals * feeding the chemicals in to the mangle trough |
| **Performance Criteria (PC) w.r.t. the Scope** | |
| **Elements** | **Performance Criteria** |
| Dissolving and mixing the chemicals | To be competent, you must be able to:   1. dissolve the pre weighed or dispensed chemicals in the drum 2. stir & mix the chemicals properly to make a homogenous liquid 3. adjust the ph, temp & concentration of the mixture as specified in the finishing recipe |
| Feeding the chemicals into the mangle trough | 1. feed the chemicals either manually or via pump to the mangle trough 2. adjust the mangle pressure to get the required pick up |
| **Knowledge and Understanding (K)** | |
| 1. **Organizational Context** (Knowledge of the company/ organization and its processes) | You need to know and understand:   1. procedure followed to get the final output in processing unit 2. general rules and regulations in processing unit 3. safe working practices to be adopted in processing unit 4. how to report to the supervisor or higher authority about any grievances faced |
| 1. **Technical Knowledge** | You need to know and understand:   1. use of various mixing tools 2. handling of various chemicals 3. effects of pick up on finished fabric 4. knowledge of various finishing recipes & their use |
| **Skills (S)** | |
|  | **Reading Skills** |
| You need to know and understand how to:   1. read and comprehend written instructions 2. read any application sent by other colleagues |
| **Oral Communication (Listening and Speaking skills)** |
| You need to know and understand how to:   1. communicate with supervisor appropriately 2. talk to others to convey information effectively |
| 1. **Professional Skills** | **Problem Solving** |
| You need to know and understand how to:   1. identify the real reason of problem faced 2. apply problem-solving approaches in different situations 3. refer anomalies to the supervisor 4. seek clarification on problems from others |
| **Attention to Detail** |
| You need to know and understand how to:   1. apply good attention to detail 2. check your work is complete and free from errors 3. make sure every kind of communication is error free |
| 1. **Technical Skills** | 1. You need to know and understand : 2. methods and chemicals used for developing different types of dyestuffs 3. good matching skills & knowledge about the colours |

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| **NOS Code** | **TSC/N 3903** | | |
| **Credits (NSQF)**  **[*OPTIONAL*]** | **TBD** | **Version number** | **1.0** |
| **Industry** | **Textile** | **Drafted on** | **15/12/15** |
| **Industry Sub-sector** | **Processing** | **Last reviewed on** | **25/02/15** |
| **Occupation** | **Finishing** | **Next review date** | **01/03/16** |

**National Occupational Standard**

**Overview**

**This unit is about maintaining work areas and activities to ensure tools and machines are maintained as per norms.**

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| **Unit Code**  National Occupational Standard | **TSC/ N9001** |
| **Unit Title**  **(Task)** | Maintaining work area, tools and machines |
| **Description** | This unit provides performance criteria, knowledge & understanding and skills & abilities required to organise/ maintain work areas and activities to ensure tools and machines are maintained as per norms |
| Scope | **This unit/task covers the following:**   * Proper maintaining of work area and activities |
| **Performance Criteria (PC) w.r.t. the Scope** | |
| **Elements** | **Performance Criteria** |
| Maintain the work area, tools and machines | To be competent, you must be able to:   1. handle materials, machinery, equipment and tools with care and use them in the correct way 2. use correct lifting and handling procedures 3. use materials to minimize waste 4. maintain a clean and hazard free working area 5. maintain tools and equipment 6. carry out running maintenance within agreed schedules 7. carry out maintenance and/or cleaning within one’s responsibility 8. report unsafe equipment and other dangerous occurrences 9. ensure that the correct machine guards are in place 10. work in a comfortable position with the correct posture 11. use cleaning equipment and methods appropriate for the work to be carried out 12. dispose of waste safely in the designated location 13. store cleaning equipment safely after use 14. carry out cleaning according to schedules and limits of responsibility |
| **Knowledge and Understanding (K)** | |
| 1. **Organizational Context** (Knowledge of the company/ organization and its processes) | You need to know and understand:   1. personal hygiene and duty of care 2. safe working practices and organisational procedures 3. limits of your own responsibility 4. ways of resolving with problems within the work area 5. the production process and the specific work activities that relate to the whole process 6. the importance of effective communication with supervisors 7. the lines of communication, authority and reporting procedures 8. the organisation’s rules, codes and guidelines (including timekeeping) 9. the company’s quality standards 10. the importance of complying with written instructions 11. equipment operating procedures / supervisor’s instructions |
| 1. **Technical Knowledge** | You need to know and understand:   1. work instructions and specifications and interpret them accurately 2. relation between work role and the overall manufacturing process 3. hazards likely to be encountered when conducting routine maintenance 4. the importance of taking action when problems are identified 5. different ways of minimising waste 6. the importance of running maintenance and regular cleaning 7. effects of contamination on products i.e. machine oil, dirt, foreign materials 8. common faults with equipment and the method to rectify 9. maintenance procedures 10. different types of cleaning equipment and substances and their use 11. safe working practices for cleaning and the method of carrying them out |

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| **Skills (S)** | |
| 1. **Core Skills/ Generic Skills** | **Reading Skills** |
| You need to know and understand how to:   1. read and comprehend written instructions 2. read any application sent by other colleagues |
| **Oral Communication (Listening and Speaking skills)** |
| You need to know and understand how to:   1. communicate with supervisor appropriately 2. talk to others to convey information effectively |
| 1. **Professional Skills** | **Problem Solving** |
| You need to know and understand how to:   1. identify the real reason of problem faced 2. apply problem-solving approaches in different situations 3. refer anomalies to the supervisor 4. seek clarification on problems from others |
| **Attention to Detail** |
| You need to know and understand how to:   1. apply good attention to detail 2. check your work is complete and free from errors 3. make sure every kind of communication is error free |
| 1. **C. Technical Skills** | You need to know and understand :   1. communicate effectively 2. apply leadership skills wherever required 3. take initiative at the right place 4. understand the requirement to be creative |

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| **NOS Code** | **TSC/ N9001** | | |
| **Credits (NSQF)**  **[*OPTIONAL*]** | **TBD** | **Version number** | **1.0** |
| **Industry** | **Textile** | **Drafted on** | **15/12/15** |
| **Industry Sub-sector** | **Processing** | **Last reviewed on** | **25/02/15** |
| **Occupation** | **Finishing** | **Next review date** | **01/03/16** |

**National Occupational Standard**

**Overview**

# This unit is about working as part of a team in the textile industry.

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| **Unit Code** | **TSC/ N9002** |
| **Unit Title**  National Occupational Standard  **(Task)** | Working in a team |
| **Description** | This unit is about working as a team member in the role of processing unit tenter in the textile industry |
| Scope | **This unit/task covers the following:**   * commitment and trust * communication * adaptability * creative freedom |
| **Performance Criteria (PC) w.r.t. the Scope** | |
| **Elements** | **Performance Criteria** |
| Commitment and trust | To be competent, you must be able to:   1. be accountable to the own role in whole process 2. perform all roles with full responsibility 3. be effective and efficient at workplace |
| Communication | 1. properly communicate about company policies 2. report all problems faced during the process 3. talk politely with other team members and colleagues 4. submit daily report of own performance |
| Adaptability | 1. adjust in different work situations 2. give due importance to others’ point of view 3. avoid conflicting situations 4. collaborate with colleagues performing the pre-required and post-required   duty of processing unit tenter |
| Creative freedom | 1. develop new ideas for work procedures 2. improve upon the existing techniques to increase process efficiency |
| **Knowledge and Understanding (K)** | |
| 1. **Organizational Context** | You need to know and understand:   1. general rules and regulations in a textile mill 2. procedure followed to get the final output in the textile mill 3. safe working practices to be adopted in textile mill 4. how to report to the supervisor or higher authority about any grievances faced |
| 1. **Technical Knowledge** | 1. the importance of the previous and next step of the process 2. process flow in a textile mill and the concerned workers 3. material flow in a textile mill and the required person 4. functions of different parts of the machine 5. tools and equipments used 6. guidelines for operating the machine 7. safety procedures to be followed in the machine |
| **Skills (S)** | |
| 1. **Core Skills/ Generic Skills** | **Writing Skills** |
| You need to know and understand how to:   1. write in local language 2. write daily work report 3. write grievance complaint application |
| **Reading Skills** |
| You need to know and understand how to:   1. comprehend written instructions 2. read any application sent by other colleagues |
| **Oral Communication (Listening and Speaking skills)** |
| You need to know and understand how to:   1. communicate with supervisor appropriately 2. talk to co-workers to convey information effectively |
| 1. **Professional Skills** | **Problem Solving** |
| You need to know and understand how to:   1. identify the real reason of problem faced 2. be able to find the most effective solution to the problems faced |
| **Attention to Detail** |
| You need to know and understand how to:   1. apply good attention to detail 2. ensure every kind of communication is error free |
| 1. **Technical Skills** | You need to know and understand how to:   1. communicate effectively 2. apply leadership skills wherever required 3. take initiative at the right place 4. understand the requirement to be creative |

**NOS Version Control**

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| **NOS Code** | **TSC/ N9002** | | |
| **Credits (NSQF)**  **[*OPTIONAL*]** | **TBD** | **Version number** | **1.0** |
| **Industry** | **Textile** | **Drafted on** | **15/12/15** |
| **Industry Sub-sector** | **Processing** | **Last reviewed on** | **25/02/15** |
| **Occupation** | **Finishing** | **Next review date** | **01/03/16** |

**National Occupational Standard**

**Overview**

# This unit is about maintaining health, safety, and security standards at workplace.

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| **Unit Code**  National Occupational Standard | **TSC/ N9003** |
| **Unit Title**  **(Task)** | Maintain health, safety and security at work place |
| **Description** | This unit provides performance criteria, knowledge & understanding and skills & abilities required to comply with health, safety and security requirements at the workplace and covers procedure to prevent, control and minimize risk to self and others. |
| Scope | **This unit/task covers the following:**   * to recognize hazards * to plan safety techniques * to implement programs * to audit workplace |
| **Performance Criteria (PC) w.r.t. the Scope** | |
| **Elements** | **Performance Criteria** |
| Comply with health, Safety and security requirements at work | To be competent, operator must be able to:   1. comply with health and safety related instructions applicable to the workplace 2. use and maintain personal protective equipment such as “ ear plug” “ nose mask “ “ head cap” etc., as per protocol 3. carry out own activities in line with approved guidelines and procedures 4. maintain a healthy lifestyle and guard against dependency on intoxicants 5. follow environment management system related procedures 6. identify and correct (if possible) malfunctions in machinery and equipment 7. report any service malfunctions that cannot be rectified 8. store materials and equipment in line with organisational requirements 9. safely handle and remove waste 10. minimize health and safety risks to self and others due to own actions 11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks 12. monitor the workplace and work processes for potential risks and threat 13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned 14. report hazards and potential risks/ threats to supervisors or other authorized personnel 15. participate in mock drills/ evacuation procedures organized at the workplace 16. undertake first aid, fire-fighting and emergency response training, if asked to do so 17. take action based on instructions in the event of fire, emergencies or accidents 18. follow organisation procedures for shutdown and evacuation when required |
| Recognizing the hazards | To be competent, you must be able to:   1. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry 2. recognise other possible security issues existing in the workplace |
| Planning the safety techniques | 1. recognise different measures to curb the hazards |
| Implementing the programs | 1. communicate the safety plan to everyone 2. attach disciplinary rules with the implementation |
| **Knowledge and Understanding (K)** | |
| 1. **Organizational Context** (Knowledge of the company/ organization and its processes) | You need to know and understand:   1. general rules and regulations in a textile mill 2. safe working practices to be adopted in textile mill 3. quality systems and other processes practiced in the textile mill 4. health and safety related practices applicable at the workplace 5. potential hazards, risks and threats based on nature of operations 6. organizational procedures for safe handling of equipment and machine operations 7. potential risks due to own actions and methods to minimize these 8. environmental management system related procedures at the workplace 9. layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points 10. potential accidents and emergencies and response to these scenarios 11. reporting protocol and documentation required 12. details of personnel trained in first aid, fire-fighting and emergency response 13. actions to take in the event of a mock drills/ evacuation procedures or actual accident, emergency or fire |
| 1. **Technical Knowledge** | You need to know and understand:   1. occupational health and safety risks and methods 2. personal protective equipment and method of use 3. identification, handling and storage of hazardous substances 4. proper disposal system for waste and by-products 5. signage related to health and safety and their meaning 6. importance of sound health, hygiene and good habits 7. ill-effects of alcohol, tobacco and drugs |
| **Skills (S)** | |
| 1. **Core Skills/ Generic Skills** | **Writing Skills** |
| You need to know and understand how to:   1. write in local language |
| **Reading Skills** |
| 1. read and understand the company instructions 2. read and understand the local language 3. read and understand the safety guidelines |
| **Oral Communication (Listening and Speaking skills)** |
| 1. listen to others attentively 2. respond to emergencies, accidents or fire at the workplace 3. evacuate the premises and help others in need while doing so 4. the value of physical fitness, personal hygiene and good habits 5. talk with others politely |
| 1. **Professional Skills** | **Decision Making** |
| You need to know and understand :   1. identify correct safety measure for particular hazard 2. make required safety plans as and when required 3. raise alarm in case of emergency |
| **Analytical Thinking** |
| 1. know the use of correct safety measure whenever required |
| **Attention to Detail** |
| 1. be attentive to details 2. be careful to avoid occurrence of hazards |
| 1. **Technical Skills** | You need to know and understand :   1. maintain neatness at work 2. procedure for reporting unwanted behavior |

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| **NOS Code** | **TSC/ N9003** | | |
| **Credits (NSQF)**  **[*OPTIONAL*]** | **TBD** | **Version number** | **1.0** |
| **Industry** | **Textile** | **Drafted on** | **15/12/15** |
| **Industry Sub-sector** | **Processing** | **Last reviewed on** | **25/02/15** |
| **Occupation** | **Finishing** | **Next review date** | **01/03/16** |

**NOS Version Control**

**National Occupational Standard**

**Overview**

# This unit is about knowing, understanding, and complying with the requirements of the organization and the textile industry

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| **Unit Code**  National Occupational Standard | **TSC/ N9004** |
| **Unit Title**  **(Task)** | Comply with industry and organizational requirements |
| **Description** | This unit is about knowing, understanding, and complying with the requirements of the organization and the textle industry |
| Scope | **This unit/task covers the following:**   * focus on self development * focus on team work * know and understand organizational standards * know and understand industry standards |
| **Performance Criteria (PC) w.r.t. the Scope** | |
| **Elements** | **PerformanceCriteria** |
| Self- development | To be competent, you must be able to:   1. perform own duties effectively 2. take responsibility for own actions 3. be accountable towards the job role and assigned duties 4. take initiative and innovate the existing methods 5. focus on self-learning and improvement |
| Team work | 1. co-ordinate with all the team members and colleagues 2. communicate politely 3. avoid conflicts and miscommunication |
| Organisational standards | 1. know the organisational standards 2. implement them in your performance 3. motivate others to follow them |
| Industry standards | 1. know the industry standards 2. align them with organisation standards |
| **Knowledge and Understanding (K)** | |
| 1. **Organizational Context** (Knowledge of the company/ organization and its processes) | You need to know and understand:   1. general rules and regulations in a textile mill 2. reporting to the supervisor or higher authority 3. knowledge of organisationl standards 4. knowledge of industry standards |
| 1. **Technical Knowledge** | You need to know and understand:   1. process and material flow in a processing unit 2. importance of compying with the standards 3. guidelines for cleaning the various part of machine |
| **Skills (S)** | |
| 1. **Core Skills/ Generic Skills** | **Writing Skills** |
| You need to know and understand how to:   1. write reports 2. write in local language |
| **Reading Skills** |
| You need to know and understand how to:   1. read the local language 2. read one more language than the local language 3. read and comprehend the standards and rules |
| **Oral Communication (Listening and Speaking skills)** |
| You need to know and understand how to:   1. talk effectively with others 2. put forward your point 3. listen to others |
| 1. **Technical Skills** | You need to know and understand :   1. procedure of preparing the industry standards 2. procedure to follow the given standards 3. procedure to comply with the standards |

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| **NOS Code** | **TSC/N 9004** | | |
| **Credits (NSQF)**  **[*OPTIONAL*]** | **TBD** | **Version number** | **1.0** |
| **Industry** | **Textile** | **Drafted on** | **15/12/15** |
| **Industry Sub-sector** | **Processing** | **Last reviewed on** | **25/02/15** |
| **Occupation** | **Finishing** | **Next review date** | **01/03/16** |

**Assessment criteria**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Job Role: Stenter Machine Operator Qualification Pack: Stenter Machine Operator Sector Skill Council: Textile Sector Skill Council** | | | | | | |
|
| **Guidelines for assessment :- 1. Criteria for assessment for each qualification pack will be created by the Sector Skill Council. Each performance criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for theory & skill practical for each PC.  2. The assessment for the theory part will be based on knowledge bank of question created by the SSC.  3. Individual assessment agencies will create unique evaluations for skill practical for every student each examination/training centre (as per assessment criteria below).  4. To pass the qualification pack, every trainee should achieve minimum grade 'C' (More Than 90% - "A+", 80%-89%-"A", 70%-79%-"B+", 60%-69%-"B", 50%-59%-"C", 49% or less is "F")** | | | | | | |
|  | | | | | | |
| **National Occupational Standards (NOS)** | **Performance Criteria (PC)** | **Total Marks** | **Out Of** | **Marks Allocation** | | |
| **Theory** | **Skills Practical** | **Viva** |
| **1. TSC/ N3901 Taking charge of shift and handing over shift to operator** | **PC1. come at least 10 - 15 minutes earlier to the work place** | **42** | **2** | **0** | **2** | **0** |
| **PC2. bring the necessary operational tools to the department** | **1** | **0** | **1** | **0** |
| **PC3. meet the previous shift operator and discuss with him/ her regarding the issues faced by them with respect to the quality or production or spare or safety or any other specific instruction etc.** | **3** | **0** | **2** | **1** |
| **PC4. understand the fabric being processed & process running on the machine** | **3** | **1** | **1** | **1** |
| **PC5. ensure the technical details are mentioned on the job card display on the machine** | **3** | **1** | **1** | **1** |
| **PC6. check for the availability of the spare trolley for unloading the fabric** | **1** | **0** | **1** | **0** |
| **PC7. check the next batch to be processed is ready near the machine** | **1** | **0** | **1** | **0** |
| **PC8. ensure the required dyes & chemicals are already weighed & prepared** | **1** | **0** | **1** | **0** |
| **PC9. check the cleanliness of the machines & other work areas** | **2** | **0** | **2** | **0** |
| **PC10. question the previous shift operator for any deviation in the above and bring the same to the knowledge of his/ her shift superior as well that of the previous shift as well.** | **2** | **0** | **2** | **0** |
| **PC11. hand over the shift to the incoming operator in a proper manner** | **1** | **0** | **1** | **0** |
| **PC12. ensure in providing the details regarding fabric quality & the process running on the machine** | **3** | **2** | **0** | **1** |
| **PC13. provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine.** | **2** | **0** | **2** | **0** |
| **PC14. ensure the empty trolley is near the machine for unloading the fabric** | **1** | **0** | **1** | **0** |
| **PC15. ensure the next lot to be processed, which is already stitched & arranged properly is ready near the machine** | **2** | **0** | **2** | **0** |
| **PC16. ensure the required dyes & chemicals for the next lot or next process are weighed & prepared** | **2** | **0** | **2** | **0** |
| **PC17. get clearance from the incoming counterpart before leaving the work spot** | **2** | **0** | **2** | **0** |
| **PC18. report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift** | **2** | **0** | **2** | **0** |
| **PC19. ensure the shift has to be properly handed over to the incoming shift operator** | **2** | **0** | **2** | **0** |
| **PC20. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and leave the department only after getting concurrence for the same from his/ her superiors** | **3** | **0** | **2** | **1** |
| **PC21. collect the wastes from waste collection bags, weigh them and transport to storage area** | **1** | **0** | **1** | **0** |
| **PC22. ensure the machine and its work place is clean** | **2** | **0** | **2** | **0** |
|  | **42** | **4** | **33** | **5** |
| **Total** | **Weightage %** |  | **10%** | **79%** | **12%** |
|  | | | | | | |
| **2. TSC/ N3902 Operating the Stenter Machine** | **PC1. ensure that the machine is clean** | **37** | **2** | **0** | **2** | **0** |
| **PC2. feed the fabric from the batch or trolley in the center of the machine** | **2** | **0** | **2** | **0** |
| **PC3. ensure fabric is crease-less and evenly fed into the machine** | **2** | **0** | **2** | **0** |
| **PC4. know the operations of the machine** | **2** | **0** | **2** | **0** |
| **PC5. read & understand the process being followed to do the task** | **3** | **1** | **1** | **1** |
| **PC6. set the width maximum and minimum once a day keep even tension on fabric throughout the process** | **2** | **0** | **1** | **1** |
| **PC7. keep even tension on fabric throughout the process** | **2** | **0** | **2** | **0** |
| **PC8. keep optimum pressure of the squeezer rolls to get specified results** | **2** | **0** | **1** | **1** |
| **PC9. set the required temp & fan speeds in all chambers** | **3** | **1** | **1** | **1** |
| **PC10. feed the fabric to the stenter chain** | **1** | **0** | **1** | **0** |
| **PC11. adjust the overfeed device as per the requirement of the fabric** | **2** | **0** | **1** | **1** |
| **PC12. start the machine & take out the fabric at the delivery end** | **1** | **0** | **1** | **0** |
| **PC13. check various control parameters such as temp, width, mangle pressure & machine speed at regular interval** ,**hardness of the padder** | **3** | **0** | **2** | **1** |
| **PC14. make sure the machine is kept clean at all times ,before loading, while running & after unloading the fabric** | **2** | **0** | **2** | **0** |
| **PC15. follow the preventive maintenance schedule & ensure the machine is running smoothly** | **2** | **0** | **2** | **0** |
| **PC16. check that all controls are functioning properly** | **2** | **0** | **2** | **0** |
| **PC17. ensure the right quality of water , steam & air is available for proper functioning of machine** | **2** | **0** | **2** | **0** |
| **PC18. cool down the machine after completion of job** | **2** | **0** | **2** | **0** |
|  | **37** | **2** | **29** | **6** |
| **Total** | **Weightage %** |  | **5%** | **78%** | **16%** |
|  | | | | | | |
| **3. TSC/N 3903 Recording the Finishing Chemicals** | **PC1. dissolve the pre weighed or dispensed chemicals in the drum** | **10** | **2** | **0** | **2** | **0** |
| **PC2. stir & mix the chemicals properly to make a homogenous liquid** | **2** | **1** | **1** | **0** |
| **PC3. adjust the ph, temp & concentration of the mixture as specified in the finishing recipe** | **3** | **1** | **1** | **1** |
| **PC4. feed the chemicals either manually or via pump to the mangle trough** | **1** | **0** | **1** | **0** |
| **PC5. adjust the mangle pressure to get the required pick up** | **2** | **0** | **2** | **0** |
|  | **10** | **2** | **7** | **1** |
| **Total** | **Weightage %** |  | **20%** | **70%** | **10%** |
|  | | | | | | |
| **4. TSC/ N9001 Maintain work area, tools and machines** | **PC1. handle materials, machinery, equipment and tools with care and use them in the correct way** | **29** | **3** | **1** | **2** | **0** |
| **PC2. use correct lifting and handling procedures** | **1** | **0** | **1** | **0** |
| **PC3. use materials to minimize waste** | **2** | **1** | **1** | **0** |
| **PC4. maintain a clean and hazard free working area** | **3** | **1** | **1** | **1** |
| **PC5. maintain tools and equipment** | **3** | **1** | **2** | **0** |
| **PC6. carry out running maintenance within agreed schedules** | **2** | **1** | **1** | **0** |
| **PC7. carry out maintenance and/or cleaning within one’s responsibility** | **1** | **0** | **1** | **0** |
| **PC8. report unsafe equipment and other dangerous occurrences** | **1** | **1** | **0** | **0** |
| **PC9. ensure that the correct machine guards are in place** | **2** | **1** | **1** | **0** |
| **PC10. work in a comfortable position with the correct posture** | **3** | **1** | **2** | **0** |
| **PC11. use cleaning equipment and methods appropriate for the work to be carried out** | **2** | **1** | **1** | **0** |
| **PC12. dispose of waste safely in the designated location** | **2** | **0** | **2** | **0** |
| **PC13. store cleaning equipment safely after use** | **2** | **0** | **2** | **0** |
| **PC14. carry out cleaning according to schedules and limits of responsibility** | **2** | **1** | **1** | **0** |
|  | **29** | **10** | **18** | **1** |
| **Total** | **Weightage %** |  | **34%** | **62%** | **3%** |
|  | | | | | | |
| **5.TSC/ N9002 Working in a team** | **PC1. be accountable to the own role in whole process** | **26** | **2** | **1** | **1** | **0** |
| **PC2. perform all roles with full responsibility** | **3** | **1** | **2** | **0** |
| **PC3. be effective and efficient at workplace** | **4** | **1** | **2** | **1** |
| **PC4. properly communicate about company policies** | **2** | **1** | **0** | **1** |
| **PC5. report all problems faced during the process** | **1** | **1** | **0** | **0** |
| **PC6. talk politely with other team members and colleagues** | **2** | **1** | **1** | **0** |
| **PC7. submit daily report of own performance** | **1** | **0** | **1** | **0** |
| **PC8. adjust in different work situations** | **2** | **0** | **2** | **0** |
| **PC9. give due importance to others’ point of view** | **2** | **1** | **0** | **1** |
| **PC10. avoid conflicting situations** | **3** | **1** | **1** | **1** |
| **PC11. develop new ideas for work procedures** | **2** | **1** | **1** | **0** |
| **PC12. improve upon the existing techniques to increase process efficiency** | **2** | **1** | **1** | **0** |
|  | **26** | **10** | **12** | **4** |
| **Total** | **Weightage %** |  | **38%** | **46%** | **15%** |
|  | | | | | | |
| **6. TSC/ N9003 Maintain health, safety and security at workplace** | **PC1. comply with health and safety related instructions applicable to the workplace** | **71** | **5** | **1** | **3** | **1** |
| **PC2. use and maintain personal protective equipment such as “ear plug”, “ nose mask “, “ head cap” etc., as per protocol** | **5** | **1** | **3** | **1** |
| **PC3. carry out own activities in line with approved guidelines and procedures** | **3** | **1** | **2** | **0** |
| **PC4. maintain a healthy lifestyle and guard against dependency on intoxicants** | **2** | **1** | **0** | **1** |
| **PC5. follow environment management system related procedures** | **3** | **1** | **2** | **0** |
| **PC6. identify and correct (if possible) malfunctions in machinery and equipment** | **3** | **1** | **1** | **1** |
| **PC7. report any service malfunctions that cannot be rectified** | **2** | **1** | **0** | **1** |
| **PC8. store materials and equipment in line with organisational requirements** | **2** | **0** | **1** | **1** |
| **PC9. safely handle and remove waste** | **2** | **0** | **2** | **0** |
| **PC10. minimize health and safety risks to self and others due to own actions** | **3** | **1** | **1** | **1** |
| **PC11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks** | **3** | **1** | **1** | **1** |
| **PC12. monitor the workplace and work processes for potential risks and threat** | **2** | **0** | **2** | **0** |
| **PC13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned** | **3** | **2** | **0** | **1** |
| **PC14. report hazards and potential risks/ threats to supervisors or other authorized personnel** | **3** | **2** | **0** | **1** |
| **PC15. participate in mock drills/ evacuation procedures organized at the workplace** | **3** | **1** | **2** | **0** |
| **PC16. undertake first aid, fire-fighting and emergency response training, if asked to do so** | **5** | **2** | **2** | **1** |
| **PC17. take action based on instructions in the event of fire, emergencies or accidents** | **4** | **1** | **2** | **1** |
| **PC18. follow organisation procedures for shutdown and evacuation when required** | **2** | **0** | **2** | **0** |
| **PC19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry** | **5** | **1** | **3** | **1** |
| **PC20. recognise other possible security issues existing in the workplace** | **3** | **1** | **1** | **1** |
| **PC21. attach disciplinary rules with the implementation** | **3** | **1** | **2** | **0** |
| **PC22. communicate the safety plan to everyone** | **3** | **2** | **0** | **1** |
| **PC23. attach disciplinary rules with the implementation** | **2** | **1** | **1** | **0** |
|  | **71** | **23** | **33** | **15** |
| **Total** | **Weightage %** |  | **32%** | **46%** | **21%** |
|  | | | | | | |
| **7. TSC/ N9004 Comply with industry and organisational requirements** | **PC1. perform own duties effectively** | **39** | **4** | **1** | **2** | **1** |
| **PC2. take responsibility for own actions** | **4** | **1** | **2** | **1** |
| **PC3. be accountable towards the job role and assigned duties** | **3** | **1** | **1** | **1** |
| **PC4. take initiative and innovate the existing methods** | **4** | **1** | **2** | **1** |
| **PC5. focus on self-learning and improvement** | **3** | **1** | **1** | **1** |
| **PC6. co-ordinate with all the team members and colleagues** | **3** | **1** | **2** | **0** |
| **PC7. communicate politely** | **3** | **1** | **2** | **0** |
| **PC8. avoid conflicts and miscommunication** | **3** | **1** | **2** | **0** |
| **PC9. know the organisational standards** | **2** | **1** | **1** | **0** |
| **PC10. implement them in your performance** | **3** | **1** | **2** | **0** |
| **PC11. motivate others to follow them** | **3** | **1** | **2** | **0** |
| **PC12. know the industry standards** | **2** | **1** | **0** | **1** |
| **PC13. align them with organisation standards** | **2** | **0** | **2** | **0** |
|  | **39** | **12** | **21** | **6** |
| **Total** | **Weightage %** |  | **31%** | **54%** | **15%** |
| **Total** |  | **254** | **63** | **153** | **38** |
| **Grand Total-1** |  | **254** | | | | |