PAINTS AND COATINGS SKILL COUNCIL

सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP

Qualification Pack

N·S·D·C National Skill Development Corporation
Transforming the skill landscape

Protective and Marine Painter

Electives: PCS/N5111 : Paint the substrate./ PCS/N5112 : Perform Floor Coating/ PCS/N5113 : Perform Road Marking

QP Code: PCS/Q5109

Version: 2.0

NSQF Level: 4

Paints and Coatings Skill Council || B 103, Neelam Centre, S. K. Ahire Marg, Worli
Mumbai – 400030

Contents

PCS/Q5109: Protective and Marine Painter

Brief Job Description

The individual at work assesses the environmental conditions which the substrate has to withstand, prepares its surface and then applies protective paint or marine paint as per product specification or customers requirement.

Personal Attributes

The person must withstand long hours of physical labour, possess arm-hand steadiness, possess trunk strength, demonstrate highly flexible movement, have gross body equilibrium as per the recommended standards, possess near vision, demonstrate a good eye for minute details.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. PCS/N5110: Prepare to paint the substrate
2. PCS/N9901: Co-ordinate with colleagues and customers
3. PCS/N9902: Maintain standards of product/ service quality
4. PCS/N9903: Maintain OH&S standards and follow environmental norms

Electives*(mandatory to select at least one):*

Elective 1: PCS/N5111 : Paint the substrate.

The job holder is responsible for painting the substrate surface as per the standard procedure and inspecting the painted surface.

1. PCS/N5111: Paint the substrate

Elective 2: PCS/N5112 : Perform Floor Coating

The job holder is responsible for coating the floor.

1. PCS/N5112: Perform Floor Coating

Elective 3: PCS/N5113 : Perform Road Marking

The job holder is responsible for applying road marking paint.

1. PCS/N5113: Perform Road Marking

Qualification Pack (QP) Parameters

Sector	Paints and Coatings
Sub-Sector	Application
Occupation	Decorative and Industrial Paint Application
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO 2015-7131.0200, 7131.0300
Minimum Educational Qualification & Experience	8th Class with 2 Years of experience OR I.T.I with 2 Years of experience OR 10th Class with 2 Years of experience OR 10th Class + I.T.I with NA of experience
Minimum Level of Education for Training in School	8th Class
Pre-Requisite License or Training	Not Applicable
Minimum Job Entry Age	18 Years
Last Reviewed On	31/03/2022
Next Review Date	31/03/2025
NSQC Approval Date	31/03/2022
Version	2.0
Reference code on NQR	2022/CP/PCSC/05736
NQR Version	1.0

PCS/N5110: Prepare to paint the substrate

Description

This OS unit is about inspecting, analysing and preparing the substrate to be painted.

Scope

The scope covers the following :

- Analyse substrate/ surface
- Prepare the surface for painting
- Inspect the surface

Elements and Performance Criteria

Analyse substrate/ surface

To be competent, the user/individual on the job must be able to:

PC1. check the ambient % relative humidity and temperature suitability for the process

PC2. inspect the substrate/ surface for oil/grease, dirt, salt or white patches/ rust and imperfections

PC3. check the durability of scaffolding for personal safety and obtain approval on it from the competent authority

PC4. identify the materials in the surroundings to be masked before preparation and painting

PC5. check the adhesion of previously applied coating onto the surface

PC6. identify the factors (type of substrate/ floor, type of contamination, desired cleaning grade, surface profile, etc.) that determine the type of surface preparation required for the substrate/ floor

PC7. compare various types of surface preparation methods like washing (with detergent and water), grinding, scarifying, vacuum blast cleaning, acid etching, etc.

Prepare the surface for painting

To be competent, the user/individual on the job must be able to:

PC8. mask the materials in the surroundings that do not require painting

PC9. clean the surface with the help of chemicals -to free it of oil/grease, dirt, rust, soil, salts, and other contaminants

PC10. prepare the surface for painting using wire brush, chipping tool, power tool, hydro or abrasive blast machines

PC11. perform sealing of cracks/crevices/joints on the floor to prevent water seepage

PC12. patch the cracks by widening the cracks to a sufficient size and to a depth of 1–2 cm, using an angle grinder and a compatible filler compound

PC13. arrange for the repair of large (>5mm in depth) cracks, holes, and joints with the help of a solvent-less and colourless epoxy topcoat, mixed with a sufficient quantity of dry natural sand of suitable grain size

PC14. select the appropriate surface preparation method based on the type of the substrate/ floor (natural/Kota/Kadapa stone type/tile/marble/concrete/mosaic), the level difference or undulations on the substrate/ floor, the level of smoothness, etc.

PC15. clean the previously coated floors with the help of detergent solution in case of mild contamination of dust or dirt or with the help of scarifying method in case of deep-seated oil contamination

PC16. remove previously applied coating mechanically in case of poor adhesion

PC17. clean the surface by sweeping or vacuum cleaning after surface preparation to remove any sanding residue/ dust

PC18. perform coving of corners using a mix of natural sand and solvent-less epoxy or an epoxy-based coving compound

Inspect the surface

To be competent, the user/individual on the job must be able to:

PC19. check whether all imperfections have been treated

PC20. check whether the surface profile is as per the product specification

PC21. perform pre-inspection of the surface before applying the coating

PC22. check if the floor to be coated has a minimum pull-off adhesion strength of 1.5N/mm2 and a compressive strength of at least 25 N/mm2

PC23. ensure that the floor has matured for a minimum of 28-42 days in ambient conditions before coating

PC24. examine the moisture content of the floor, using either a moisture meter or by taping a 1.2 m x 1.2 m plastic sheet to the floor

PC25. check if there is any ingress of water through cracks/crevices/ joints in the substrate/ floor

PC26. ensure that the floor/ surface temperature is 3°C above the determined dew point in order to avoid moisture condensation

PC27. check if the floor/ surface temperature ranges between 10° - 40°C

PC28. perform the marking of joint positions on the floor

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. company's policy and work instructions on quality standards

KU2. importance of the individual's role in the workflow

KU3. reporting structure

KU4. occupational health and safety standards

KU5. green tag scaffolding

KU6. procedure for climbing scaffolding safely

KU7. selection of cleaning methods depending on the substrate

KU8. the factors determining the choice of surface preparation methods

KU9. various surface preparation methods and their purpose (wire brushing, chipping, power tool, hydro blasting or abrasive blasting, grinding, scarifying, acid etching, etc.)

KU10. types of abrasive for blasting such as grits or shots

KU11. selection of abrasives depending on substrate
KU12. surface profile and how to measure it
KU13. grades of blast cleaning SA1, SA2.5, SA3
KU14. common causes of poor surface preparation
KU15. common symptoms of poor surface preparation
KU16. handling and use of tools and equipment like blasting hose, wire brush, chipping tool, etc.
KU17. significance of recommended temperature, dewpoint, % relative humidity for painting process
KU18. the importance of inspection of the floor and other surfaces before and after surface preparation
KU19. various properties (pull-off adhesion strength, compressive strength, moisture content, temperature, etc.) to be checked in the substrate before surface preparation
KU20. the importance of sealing and coving cracks/crevices/joints

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read job specifications and instructions printed on tools and equipment
GS2. write reports and maintain records as per company's policy
GS3. communicate with colleagues in a pleasant, polite, calm and clear way
GS4. practise active listening to capture task requirements from the supervisor
GS5. plan the sequence of the work process
GS6. organise the materials and equipment required to do the work
GS7. ensure the delivery of quality work as per the agreed timeline
GS8. solve work-related problems like clogging of blasting hose, helper shortage, unendurable scaffolding, unavailability of PPE, etc.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Analyse substrate/ surface	**4**	**7**	**-**	**-**
PC1. check the ambient % relative humidity and temperature suitability for the process	-	-	-	-
PC2. inspect the substrate/ surface for oil/grease, dirt, salt or white patches/ rust and imperfections	-	-	-	-
PC3. check the durability of scaffolding for personal safety and obtain approval on it from the competent authority	-	-	-	-
PC4. identify the materials in the surroundings to be masked before preparation and painting	-	-	-	-
PC5. check the adhesion of previously applied coating onto the surface	-	-	-	-
PC6. identify the factors (type of substrate/ floor, type of contamination, desired cleaning grade, surface profile, etc.) that determine the type of surface preparation required for the substrate/ floor	-	-	-	-
PC7. compare various types of surface preparation methods like washing (with detergent and water), grinding, scarifying, vacuum blast cleaning, acid etching, etc.	-	-	-	-
Prepare the surface for painting	**7**	**17**	**-**	**-**
PC8. mask the materials in the surroundings that do not require painting	-	-	-	-
PC9. clean the surface with the help of chemicals -to free it of oil/grease, dirt, rust, soil, salts, and other contaminants	-	-	-	-
PC10. prepare the surface for painting using wire brush, chipping tool, power tool, hydro or abrasive blast machines	-	-	-	-
PC11. perform sealing of cracks/crevices/joints on the floor to prevent water seepage	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. patch the cracks by widening the cracks to a sufficient size and to a depth of 1–2 cm, using an angle grinder and a compatible filler compound	-	-	-	-
PC13. arrange for the repair of large (>5mm in depth) cracks, holes, and joints with the help of a solvent-less and colourless epoxy topcoat, mixed with a sufficient quantity of dry natural sand of suitable grain size	-	-	-	-
PC14. select the appropriate surface preparation method based on the type of the substrate/ floor (natural/Kota/Kadapa stone type/tile/marble/concrete/mosaic), the level difference or undulations on the substrate/ floor, the level of smoothness, etc.	-	-	-	-
PC15. clean the previously coated floors with the help of detergent solution in case of mild contamination of dust or dirt or with the help of scarifying method in case of deep-seated oil contamination	-	-	-	-
PC16. remove previously applied coating mechanically in case of poor adhesion	-	-	-	-
PC17. clean the surface by sweeping or vacuum cleaning after surface preparation to remove any sanding residue/ dust	-	-	-	-
PC18. perform coving of corners using a mix of natural sand and solvent-less epoxy or an epoxy-based coving compound	-	-	-	-
Inspect the surface	**4**	**11**	**-**	**-**
PC19. check whether all imperfections have been treated	-	-	-	-
PC20. check whether the surface profile is as per the product specification	-	-	-	-
PC21. perform pre-inspection of the surface before applying the coating	-	-	-	-
PC22. check if the floor to be coated has a minimum pull-off adhesion strength of 1.5N/mm2 and a compressive strength of at least 25 N/mm2	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. ensure that the floor has matured for a minimum of 28-42 days in ambient conditions before coating	-	-	-	-
PC24. examine the moisture content of the floor, using either a moisture meter or by taping a 1.2 m x 1.2 m plastic sheet to the floor	-	-	-	-
PC25. check if there is any ingress of water through cracks/crevices/ joints in the substrate/ floor	-	-	-	-
PC26. ensure that the floor/ surface temperature is 3°C above the determined dew point in order to avoid moisture condensation	-	-	-	-
PC27. check if the floor/ surface temperature ranges between 10° - 40°C	-	-	-	-
PC28. perform the marking of joint positions on the floor	-	-	-	-
NOS Total	**15**	**35**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	PCS/N5110
NOS Name	Prepare to paint the substrate
Sector	Paints and Coatings
Sub-Sector	Application
Occupation	Industrial Paint Application
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

PCS/N9901: Co-ordinate with colleagues and customers

Description

This OS unit is about communicating effectively with superiors, colleagues and customers, for achieving a smooth workflow.

Scope

The scope covers the following :

- Coordinate with supervisors and colleagues
- Address customer complaints and grievances
- Follow inclusive practices at work

Elements and Performance Criteria

Coordinate with supervisors and colleagues

To be competent, the user/individual on the job must be able to:

PC1. collect job order from the supervisor

PC2. establish the work output requirements, quality standards, delivery schedule, targets, performance indicators and incentive policies

PC3. ensure prompt and quality work as per agreed timeline

PC4. report challenges at work and reasons for delay to the supervisor

PC5. incorporate feedback received from the supervisor and colleagues

PC6. provide colleagues with adequate and accurate information and knowledge

PC7. ensure quality output by highlighting errors committed by colleagues, thus helping them improve

PC8. comply with the recommended steps of resolving conflicts with colleagues

Address customer complaints and grievances

To be competent, the user/individual on the job must be able to:

PC9. prepare a list of the products/services required by internal and external customers

PC10. comply with best practices to keep customer needs and complaints confidential

PC11. provide customers with adequate information on potential costs and hazards

PC12. apply organisational practices to fully understand and record customer complaints

PC13. solve customer issues/complaints or escalate to concerned authorities and supervisors as per organisational policies

Follow inclusive practices at work

To be competent, the user/individual on the job must be able to:

PC14. treat all co-workers equally, irrespective of gender and disability

PC15. ensure equal participation of people across genders in discussions

PC16. use gender-neutral/gender-inclusive terms while interacting with colleagues

PC17. report instances of discriminatory action/attitude to the supervisor

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. company's policies on confidentiality and work ethics
KU2. the market and the available products and services
KU3. company's customer profile, HR policies, reporting structure and documentation policy
KU4. standard templates for reports in the organization
KU5. the productivity targets of the organization
KU6. the importance of meeting quality standards and timelines in a team
KU7. the dos and don'ts of customer service
KU8. gender based concepts, issues and legislation
KU9. various types and degrees of disability
KU10. PwD-related legislation
KU11. inclusive practices at the workplace

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read important documents like company's work instructions, quality policy, printed instructions and job specifications
GS2. use effective writing skills for preparing documents required at the job
GS3. communicate effectively with colleagues, supervisors and customers to achieve smooth workflow and ensure rapport
GS4. organise materials and equipment required to do the work
GS5. resolve inter-personal conflicts and work-related issues such as customer complaints, customised orders, etc. by making appropriate decisions at the workplace
GS6. coordinate with different departments and multi-task as necessary
GS7. delegate work in consultation with superior or as necessary instead of allowing work to pile up

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Coordinate with supervisors and colleagues	**8**	**16**	**-**	**-**
PC1. collect job order from the supervisor	-	-	-	-
PC2. establish the work output requirements, quality standards, delivery schedule, targets, performance indicators and incentive policies	-	-	-	-
PC3. ensure prompt and quality work as per agreed timeline	-	-	-	-
PC4. report challenges at work and reasons for delay to the supervisor	-	-	-	-
PC5. incorporate feedback received from the supervisor and colleagues	-	-	-	-
PC6. provide colleagues with adequate and accurate information and knowledge	-	-	-	-
PC7. ensure quality output by highlighting errors committed by colleagues, thus helping them improve	-	-	-	-
PC8. comply with the recommended steps of resolving conflicts with colleagues	-	-	-	-
Address customer complaints and grievances	**4**	**12**	**-**	**-**
PC9. prepare a list of the products/services required by internal and external customers	-	-	-	-
PC10. comply with best practices to keep customer needs and complaints confidential	-	-	-	-
PC11. provide customers with adequate information on potential costs and hazards	-	-	-	-
PC12. apply organisational practices to fully understand and record customer complaints	-	-	-	-
PC13. solve customer issues/complaints or escalate to concerned authorities and supervisors as per organisational policies	-	-	-	-
Follow inclusive practices at work	**3**	**7**	**-**	**-**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. treat all co-workers equally, irrespective of gender and disability	-	-	-	-
PC15. ensure equal participation of people across genders in discussions	-	-	-	-
PC16. use gender-neutral/gender-inclusive terms while interacting with colleagues	-	-	-	-
PC17. report instances of discriminatory action/attitude to the supervisor	-	-	-	-
NOS Total	**15**	**35**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	PCS/N9901
NOS Name	Co-ordinate with colleagues and customers
Sector	Paints and Coatings
Sub-Sector	Application, Manufacturing
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

PCS/N9902: Maintain standards of product/ service quality

Description

This OS unit is about gaining an understanding of expected standards of product quality and/or customer service and executing the designated work in a manner that results in customer satisfaction.

Scope

The scope covers the following :

- Engage with customers to understand product/ service quality requirements
- Achieve customer satisfaction for given quality

Elements and Performance Criteria

Engage with customers to understand product/ service quality requirements

To be competent, the user/individual on the job must be able to:

PC1. identify the profiles of expected customers

PC2. evaluate market information on latest trends and customer expectations

PC3. analyse the product/service requirements and quality expectations of target customers as stipulated by the company

PC4. provide customers with the right and quality products/services

PC5. use appropriate close-ended questions to clarify customer requirements

PC6. address customer queries accurately and promptly

Achieve customer satisfaction for given quality

To be competent, the user/individual on the job must be able to:

PC7. participate in training sessions on new and innovative products/services as per the company's marketing strategies and product development needs

PC8. demonstrate the steps of escalating negative feedback to the supervisor or concerned authorities

PC9. ensure that maintenance and calibration services are extended to customers regularly as per company policies

PC10. establish the cost of fulfilling unscheduled and special customer requests in consultation with senior(s) and advise the customer on alternatives

PC11. perform appropriate tests to ensure quality adherence of the products/services

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. company's policies on quality standards and documentation for quality compliance

KU2. company's end-customer profile

KU3. the market standards of customer satisfaction

KU4. types of unscheduled and special requests expected from customers
KU5. various parameters tested for quality
KU6. test pass/fail criteria and acceptable tolerance levels
KU7. equipment used for quality tests
KU8. ways to improve company's customer satisfaction rating
KU9. standard practices in customer orientation and quality adherence

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read important documents like company's work instructions, quality policy, printed instructions and job specifications
GS2. record customer queries and complaints to support product development and enhancement
GS3. communicate effectively with colleagues while discussing quality standards
GS4. make appropriate decisions while recommending products/services and promotional offers to customers

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Engage with customers to understand product/ service quality requirements	**10**	**20**	**-**	**-**
PC1. identify the profiles of expected customers	-	-	-	-
PC2. evaluate market information on latest trends and customer expectations	-	-	-	-
PC3. analyse the product/service requirements and quality expectations of target customers as stipulated by the company	-	-	-	-
PC4. provide customers with the right and quality products/services	-	-	-	-
PC5. use appropriate close-ended questions to clarify customer requirements	-	-	-	-
PC6. address customer queries accurately and promptly	-	-	-	-
Achieve customer satisfaction for given quality	**5**	**15**	**-**	**-**
PC7. participate in training sessions on new and innovative products/services as per the company's marketing strategies and product development needs	-	-	-	-
PC8. demonstrate the steps of escalating negative feedback to the supervisor or concerned authorities	-	-	-	-
PC9. ensure that maintenance and calibration services are extended to customers regularly as per company policies	-	-	-	-
PC10. establish the cost of fulfilling unscheduled and special customer requests in consultation with senior(s) and advise the customer on alternatives	-	-	-	-
PC11. perform appropriate tests to ensure quality adherence of the products/services	-	-	-	-
NOS Total	**15**	**35**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	PCS/N9902
NOS Name	Maintain standards of product/ service quality
Sector	Paints and Coatings
Sub-Sector	Application, Manufacturing
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

PCS/N9903: Maintain OH&S standards and follow environmental norms

Description

This OS unit is about complying with workplace health, hygiene, safety, and environmental standards to have a hazard-free environment and avoid downtime. It is also about following government laid norms for waste treatment and disposal.

Scope

The scope covers the following :

- Prevent accidents at work place and damage to environment
- Follow standard health, safety, and environmental policies and procedures
- Use safety tools and personal protective equipment (PPE)
- Achieve health, safety and environmental standards

Elements and Performance Criteria

Prevent accidents at workplace and damage to environment

To be competent, the user/individual on the job must be able to:

PC1. identify eco-friendly products and machines

PC2. select suitable non-hazardous alternatives of hazardous products to control environmental pollution

PC3. practise necessary steps of eliminating or minimising health, safety and environmental hazards in the work areas

PC4. ensure that precautions, like masking items, are taken while painting in office/residence location to prevent damages

PC5. practise precautions to protect children and other family members for overspray

PC6. determine suitable ways of optimising the usage of resources (water, electricity, fuel, etc.) in various tasks, activities, and processes

PC7. check for spills/leakages in various tasks/activities/processes, plug spills/leakages, and escalate to the appropriate authority, if unable to rectify

PC8. ensure routine cleaning of tools, machines, and equipment

PC9. identify processes where energy/ electricity and material utilization can be optimized

PC10. ensure that material and water conservation processes are closely monitored at work

PC11. analyse the causes of accidents at the workplace and suggest measures to prevent such accidents from recurring

PC12. identify methods of improving the existing safety procedures at the workplace

PC13. do not smoke, ensure no smoking and open flames at the workplace

Follow standard health, safety and environmental policies and procedures

To be competent, the user/individual on the job must be able to:

PC14. segregate waste into different categories (recyclable, non-recyclable, hazardous, etc.)

PC15. practise waste disposal in the designated areas safely as per company's policies and rules

PC16. ensure appropriate ventilation in the rooms in the presence of paint vapours

PC17. check if the equipment/machine is functioning normally before starting work

PC18. ensure that electrical equipment and appliances are properly connected and turned off when not in use

PC19. check if the standard process is followed for treatment of the wastewater in the unit

PC20. use products, free of lead and heavy metal, that meet RoHS (restriction on heavy substances) specifications

PC21. stack items, in an organized way, to reduce risk of injuries while handling materials

PC22. practise handling materials, tools, acids, chemicals, equipment, etc. safely

PC23. ensure that all chemicals and acids are stored in well-ventilated and locked areas with warning signs displayed

PC24. develop a routine for unplugging the electrical equipment before performing maintenance

PC25. ensure that the floors are free of oil, water and grease to avoid slippery surface

PC26. ensure daily tasks are executed via alternative methods such as marking attendance without using biometric devices, virtual meetings, e-payments, etc.

PC27. practise social distancing at workplace, e.g. increased space, 2 meters or more, between employee work areas, prevent crowding of common areas, etc.

PC28. perform routine hygiene and sanitation checks of work area and equipment as per SOP

PC29. check the availability of the products required to maintain hygiene and sanitation

PC30. ensure entry and exit SOP are followed

Use safety tools and personal protective equipment (PPE)

To be competent, the user/individual on the job must be able to:

PC31. check if all employees are aware of MSDS (Material Safety Data Sheet) details

PC32. ensure that the employees have access to first aid kit when needed

PC33. use personal protective equipment and safety gear such as gloves, mask, headwear, footwear, glasses, goggles, etc. for specific tasks and work conditions as per SOP

PC34. adopt precautions like insulated clothing, adequate equipment insulation, dry work area, switching off the power supply when not required, etc.

PC35. check availability of general health and safety equipment such as fire extinguishers, first aid kit, safety equipment, clothing, safety installations such as fire exits, exhaust fans, etc.

Achieve health, safety and environmental standards

To be competent, the user/individual on the job must be able to:

PC36. record all first aid treatments, inspections, employees' and visitors' details, etc., to keep track of the safety measures undertaken

PC37. assess risks and ensure corrective action as per SOPs

PC38. report hazards, breaches, and incidents to appropriate authority, e.g., reporting of people with any symptoms, etc.

PC39. comply with SOPs in case of health emergency

PC40. support employees so that they can cope with stress, anxiety, etc.

PC41. ensure a safe working environment for female colleagues

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the importance of social distancing and hygiene
KU2. modes of disease transmission and symptoms of infections like fever, cough, redness, swelling and inflammation
KU3. company's policies on health, safety, documentation, and environmental procedures at the workplace
KU4. company's reporting structure
KU5. common sources of pollution and ways to minimize it
KU6. environment-friendly materials that can replace conventional materials
KU7. government and company's environmental norms
KU8. solid waste management rules 2016
KU9. recommended practices for minimizing and disposing off waste
KU10. latest methods of energy and material conservation
KU11. potential hazards, risks, and threats based on the nature of work
KU12. standard operating procedures for safe handling of chemicals, equipment and machinery
KU13. the purpose and usage of protective gears such as gloves, protective goggles, masks, etc. while working
KU14. precautionary activities and emergency procedures to be followed for workplace safety
KU15. use of first aid at the workplace
KU16. locations of fire extinguishers, emergency exits, etc.
KU17. signs of stress and anxiety

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read and interpret internal communications correctly
GS2. write formal and informal letters/emails, memos, reports, etc.
GS3. communicate effectively with others to convey relevant information
GS4. assess situations and make appropriate decisions
GS5. prioritize, organize, and complete work within prescribed timelines
GS6. address work-related issues and problems

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Prevent accidents at workplace and damage to environment	**3**	**8**	**-**	**-**
PC1. identify eco-friendly products and machines	-	-	-	-
PC2. select suitable non-hazardous alternatives of hazardous products to control environmental pollution	-	-	-	-
PC3. practise necessary steps of eliminating or minimising health, safety and environmental hazards in the work areas	-	-	-	-
PC4. ensure that precautions, like masking items, are taken while painting in office/residence location to prevent damages	-	-	-	-
PC5. practise precautions to protect children and other family members for overspray	-	-	-	-
PC6. determine suitable ways of optimising the usage of resources (water, electricity, fuel, etc.) in various tasks, activities, and processes	-	-	-	-
PC7. check for spills/leakages in various tasks/activities/processes, plug spills/leakages, and escalate to the appropriate authority, if unable to rectify	-	-	-	-
PC8. ensure routine cleaning of tools, machines, and equipment	-	-	-	-
PC9. identify processes where energy/ electricity and material utilization can be optimized	-	-	-	-
PC10. ensure that material and water conservation processes are closely monitored at work	-	-	-	-
PC11. analyse the causes of accidents at the workplace and suggest measures to prevent such accidents from recurring	-	-	-	-
PC12. identify methods of improving the existing safety procedures at the workplace	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. do not smoke, ensure no smoking and open flames at the workplace	-	-	-	-
Follow standard health, safety and environmental policies and procedures	**7**	**14**	**-**	**-**
PC14. segregate waste into different categories (recyclable, non-recyclable, hazardous, etc.)	-	-	-	-
PC15. practise waste disposal in the designated areas safely as per company's policies and rules	-	-	-	-
PC16. ensure appropriate ventilation in the rooms in the presence of paint vapours	-	-	-	-
PC17. check if the equipment/machine is functioning normally before starting work	-	-	-	-
PC18. ensure that electrical equipment and appliances are properly connected and turned off when not in use	-	-	-	-
PC19. check if the standard process is followed for treatment of the wastewater in the unit	-	-	-	-
PC20. use products, free of lead and heavy metal, that meet RoHS (restriction on heavy substances) specifications	-	-	-	-
PC21. stack items, in an organized way, to reduce risk of injuries while handling materials	-	-	-	-
PC22. practise handling materials, tools, acids, chemicals, equipment, etc. safely	-	-	-	-
PC23. ensure that all chemicals and acids are stored in well-ventilated and locked areas with warning signs displayed	-	-	-	-
PC24. develop a routine for unplugging the electrical equipment before performing maintenance	-	-	-	-
PC25. ensure that the floors are free of oil, water and grease to avoid slippery surface	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. ensure daily tasks are executed via alternative methods such as marking attendance without using biometric devices, virtual meetings, e-payments, etc.	-	-	-	-
PC27. practise social distancing at workplace, e.g. increased space, 2 meters or more, between employee work areas, prevent crowding of common areas, etc.	-	-	-	-
PC28. perform routine hygiene and sanitation checks of work area and equipment as per SOP	-	-	-	-
PC29. check the availability of the products required to maintain hygiene and sanitation	-	-	-	-
PC30. ensure entry and exit SOP are followed	-	-	-	-
Use safety tools and personal protective equipment (PPE)	**2**	**5**	**-**	**-**
PC31. check if all employees are aware of MSDS (Material Safety Data Sheet) details	-	-	-	-
PC32. ensure that the employees have access to first aid kit when needed	-	-	-	-
PC33. use personal protective equipment and safety gear such as gloves, mask, headwear, footwear, glasses, goggles, etc. for specific tasks and work conditions as per SOP	-	-	-	-
PC34. adopt precautions like insulated clothing, adequate equipment insulation, dry work area, switching off the power supply when not required, etc.	-	-	-	-
PC35. check availability of general health and safety equipment such as fire extinguishers, first aid kit, safety equipment, clothing, safety installations such as fire exits, exhaust fans, etc.	-	-	-	-
Achieve health, safety and environmental standards	**3**	**8**	**-**	**-**
PC36. record all first aid treatments, inspections, employees' and visitors' details, etc., to keep track of the safety measures undertaken	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC37. assess risks and ensure corrective action as per SOPs	-	-	-	-
PC38. report hazards, breaches, and incidents to appropriate authority, e.g., reporting of people with any symptoms, etc.	-	-	-	-
PC39. comply with SOPs in case of health emergency	-	-	-	-
PC40. support employees so that they can cope with stress, anxiety, etc.	-	-	-	-
PC41. ensure a safe working environment for female colleagues	-	-	-	-
NOS Total	**15**	**35**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	PCS/N9903
NOS Name	Maintain OH&S standards and follow environmental norms
Sector	Paints and Coatings
Sub-Sector	Application, Manufacturing
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

PCS/N5111: Paint the substrate

Description

This OS unit is about painting substrate as per standard procedure and inspecting the painted surface.

Scope

The scope covers the following :

- Paint the substrate
- Inspect the painted substrate

Elements and Performance Criteria

Paint the substrate

To be competent, the user/individual on the job must be able to:

PC1. mix paint as per specifications and in case of 2K system, mix base and hardener as per the recommended mixing ratio

PC2. perform the process of homogenising the paint in the container before preparing the paint for mixing base and hardener

PC3. prepare the mixed paint for application by adding the recommended thinner in the specified ratio

PC4. mix the thinned paint during application using an agitator (e.g., pneumatic stirrers - fit air driven agitator with pressure pot for continuous mixing during application)

PC5. use the homogenised material (mixed paint) within its pot life

PC6. select the correct application tool as per the SOP (e.g., brush, roller, air-assisted spray, airless spray gun)

PC7. check that the painting machine and airless spray gun is working properly

PC8. adjust the pressure and size of the orifice of the spray gun, for spraying paint

PC9. apply the paint on the surface - number of coats to be applied and the interval between coats should be as per SOP and/ or company's standards

PC10. perform painting on the substrate with an airless spray gun as per product specification

PC11. determine wet film thickness

PC12. use anti-fouling paint on the bottom part of the ship, (which remains submerged in water) with an airless spray gun, as per product specification

PC13. cure the coating at the drying temperature and time recommended by the company's standards/SOP

PC14. clean all application tools immediately after the application, as per company's standards/SOP

PC15. dispose off contaminated residual solvent/ waste

Inspect the painted surface

To be competent, the user/individual on the job must be able to:

PC16. visually inspect the dry painted surface for appearance and defects

PC17. check if the paint coat is even and without imperfections using recommended equipment

PC18. determine the dry film thickness
PC19. arrange for the repair of minor defects and repaint if required
PC20. compare the painted substrate with standards provided

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. company's policy and work instructions on quality standards
KU2. importance of the individual's role in the workflow
KU3. reporting structure
KU4. occupational health and safety standards
KU5. the process of mixing paints as per requirements
KU6. green tag scaffolding
KU7. use of airless spray gun
KU8. minor repair of airless spray gun
KU9. various types of paints and the thickness of paint required for different types of substrate as per their service environmental conditions
KU10. techniques of effective spray painting
KU11. common causes of poor paint application
KU12. common symptoms of poor paint application
KU13. common complaints post application
KU14. significance of the use of the recommended hardener and thinner for paints (epoxy, polyurethane) and maintaining the correct mixing ratio of the base, hardener and thinner
KU15. pot life of 2K paint
KU16. drying time of paints and coatings
KU17. interval between coats
KU18. dry and wet film thickness
KU19. need for upkeep of equipment and tools
KU20. required temperature, dew point, % relative humidity for painting process

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read job specifications and instructions printed on tools and equipment
GS2. write reports and maintain records as per company's policy
GS3. communicate with colleagues in a pleasant, polite, calm and clear way
GS4. practise active listening to capture task requirements from the supervisor
GS5. plan the sequence of the work process
GS6. organise the materials and equipment required to do the work
GS7. ensure the delivery of quality work as per the agreed timeline

GS8. solve work-related problems like clogging of blasting hose, helper shortage, unendurable scaffolding, unavailability of PPE, etc.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Paint the substrate	**10**	**25**	**-**	**-**
PC1. mix paint as per specifications and in case of 2K system, mix base and hardener as per the recommended mixing ratio	-	-	-	-
PC2. perform the process of homogenising the paint in the container before preparing the paint for mixing base and hardener	-	-	-	-
PC3. prepare the mixed paint for application by adding the recommended thinner in the specified ratio	-	-	-	-
PC4. mix the thinned paint during application using an agitator (e.g., pneumatic stirrers - fit air driven agitator with pressure pot for continuous mixing during application)	-	-	-	-
PC5. use the homogenised material (mixed paint) within its pot life	-	-	-	-
PC6. select the correct application tool as per the SOP (e.g., brush, roller, air-assisted spray, airless spray gun)	-	-	-	-
PC7. check that the painting machine and airless spray gun is working properly	-	-	-	-
PC8. adjust the pressure and size of the orifice of the spray gun, for spraying paint	-	-	-	-
PC9. apply the paint on the surface - number of coats to be applied and the interval between coats should be as per SOP and/ or company's standards	-	-	-	-
PC10. perform painting on the substrate with an airless spray gun as per product specification	-	-	-	-
PC11. determine wet film thickness	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. use anti-fouling paint on the bottom part of the ship, (which remains submerged in water) with an airless spray gun, as per product specification	-	-	-	-
PC13. cure the coating at the drying temperature and time recommended by the company's standards/SOP	-	-	-	-
PC14. clean all application tools immediately after the application, as per company's standards/SOP	-	-	-	-
PC15. dispose off contaminated residual solvent/ waste	-	-	-	-
Inspect the painted surface	**5**	**10**	**-**	**-**
PC16. visually inspect the dry painted surface for appearance and defects	-	-	-	-
PC17. check if the paint coat is even and without imperfections using recommended equipment	-	-	-	-
PC18. determine the dry film thickness	-	-	-	-
PC19. arrange for the repair of minor defects and repaint if required	-	-	-	-
PC20. compare the painted substrate with standards provided	-	-	-	-
NOS Total	**15**	**35**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	PCS/N5111
NOS Name	Paint the substrate
Sector	Paints and Coatings
Sub-Sector	Application
Occupation	Industrial Paint Application
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

PCS/N5112: Perform Floor Coating

Description

This OS unit is about applying floor coating.

Scope

The scope covers the following :

- Apply floor coating

Elements and Performance Criteria

Apply floor coating

To be competent, the user/individual on the job must be able to:

PC1. apply primer to provide excellent adhesion between the subsequent coatings (screed and top coat) and the floor

PC2. perform priming with the help of the recommended roller/squeezer, at the recommended coverage of kilograms per square meter

PC3. check if the total thickness developed through priming is well within permissible limits

PC4. ensure that the primer coat is allowed to cure at ambient temperature for 4-5 hours before application of the industrial screed

PC5. apply the screed layer within 24 hours of curing of the primer

PC6. ensure that the base, hardener, and aggregate are uniformly and slowly mixed using a slow speed stirrer

PC7. practise adding the base component, followed by the hardener and mix them for 2 minutes to obtain an even colour

PC8. perform the addition of filler pack to the base-hardener mixture and mix for 3 minutes to obtain a uniform mix

PC9. apply the screed mix immediately after mixing, by spreading it evenly over the recommended area using a steel trowel with notches

PC10. remove entrapped air with the help of a spike roller with long handle, after the screed application as well as after topcoat application

PC11. ensure that the screed is allowed to cure at ambient temperature for up to 5-8 hours to obtain the desired strength for the subsequent application

PC12. apply an intermediate coat / scratch coat to avoid any pinholes, waviness, etc.

PC13. remove undue protrusions/undulations from the cured screed coat with the help of sanding/ grinding methods

PC14. ensure that the pigment paste is added to the base at the factory to avoid mixing errors at the site

PC15. perform the mixing of base, pigment paste, hardener, and aggregate uniformly using a slow-speed mixer with a paddle attachment

PC16. apply the top coat mix, immediately after mixing, by spreading it evenly over the recommended area using a steel trowel with notches

PC17. check if the floor coating settles to an even coloured, aesthetically appealing, impervious floor

PC18. examine if the floor coating has been allowed to cure at ambient temperature for at least 24 hours

PC19. inspect the floor for visible defects/flaws like blisters, bubbles or pinholes

PC20. repair flaws by grinding the flaw area and up to 5 cm from the flaw area to the substrate level

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. importance of the individual's role in the workflow

KU2. reporting structure

KU3. occupational health and safety standards

KU4. selection of cleaning and preparing methods such as wire brush, chipping tool, power tool, hydro or abrasive blast machine, depending on the substrate

KU5. types of abrasives for blasting such as grit or shot

KU6. selection of abrasives depending on the substrate

KU7. surface profile and how to measure it

KU8. grades of blast cleaning – SA1, SA 2.5, SA3

KU9. common causes of poor surface preparation

KU10. common symptoms of poor surface preparation

KU11. handling and use of tools and equipment like blasting hose, wire brush, chipping tool, etc

KU12. significance of recommended temperature, dew point, % relative humidity for the painting process

KU13. the knowledge of various phases of floor coating (filling, priming, screed application, sanding and grinding, top coat application, etc.)

KU14. the importance of performing visual inspection and repairing flaws/defects like blisters, bubbles or pinholes

KU15. the knowledge of post-application care

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read job specifications and instructions printed on tools and equipment

GS2. write reports and maintain records as per company's policy

GS3. communicate with colleagues in a pleasant, polite, calm and clear way

GS4. practise active listening to capture task requirements from the supervisor

GS5. plan the sequence of the work process

GS6. organise the materials and equipment required to do the work

GS7. ensure the delivery of quality work as per the agreed timeline

GS8. solve work-related problems like clogging of blasting hose, helper shortage, unendurable scaffolding, wet paint, unavailability of PPE, etc.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Apply floor coating	**15**	**35**	**-**	**-**
PC1. apply primer to provide excellent adhesion between the subsequent coatings (screed and top coat) and the floor	-	-	-	-
PC2. perform priming with the help of the recommended roller/squeezer, at the recommended coverage of kilograms per square meter	-	-	-	-
PC3. check if the total thickness developed through priming is well within permissible limits	-	-	-	-
PC4. ensure that the primer coat is allowed to cure at ambient temperature for 4-5 hours before application of the industrial screed	-	-	-	-
PC5. apply the screed layer within 24 hours of curing of the primer	-	-	-	-
PC6. ensure that the base, hardener, and aggregate are uniformly and slowly mixed using a slow speed stirrer	-	-	-	-
PC7. practise adding the base component, followed by the hardener and mix them for 2 minutes to obtain an even colour	-	-	-	-
PC8. perform the addition of filler pack to the base-hardener mixture and mix for 3 minutes to obtain a uniform mix	-	-	-	-
PC9. apply the screed mix immediately after mixing, by spreading it evenly over the recommended area using a steel trowel with notches	-	-	-	-
PC10. remove entrapped air with the help of a spike roller with long handle, after the screed application as well as after topcoat application	-	-	-	-
PC11. ensure that the screed is allowed to cure at ambient temperature for up to 5-8 hours to obtain the desired strength for the subsequent application	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. apply an intermediate coat / scratch coat to avoid any pinholes, waviness, etc.	-	-	-	-
PC13. remove undue protrusions/undulations from the cured screed coat with the help of sanding/ grinding methods	-	-	-	-
PC14. ensure that the pigment paste is added to the base at the factory to avoid mixing errors at the site	-	-	-	-
PC15. perform the mixing of base, pigment paste, hardener, and aggregate uniformly using a slow-speed mixer with a paddle attachment	-	-	-	-
PC16. apply the top coat mix, immediately after mixing, by spreading it evenly over the recommended area using a steel trowel with notches	-	-	-	-
PC17. check if the floor coating settles to an even coloured, aesthetically appealing, impervious floor	-	-	-	-
PC18. examine if the floor coating has been allowed to cure at ambient temperature for at least 24 hours	-	-	-	-
PC19. inspect the floor for visible defects/flaws like blisters, bubbles or pinholes	-	-	-	-
PC20. repair flaws by grinding the flaw area and up to 5 cm from the flaw area to the substrate level	-	-	-	-
NOS Total	**15**	**35**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	PCS/N5112
NOS Name	Perform Floor Coating
Sector	Paints and Coatings
Sub-Sector	Application
Occupation	Industrial Paint Application
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

PCS/N5113: Perform Road Marking

Description

This OS unit is about applying road marking paint.

Scope

The scope covers the following :

- Apply road marking paint

Elements and Performance Criteria

Apply road marking paint

To be competent, the user/individual on the job must be able to:

PC1. analyse the effects of visibility and reflective properties of road marking paints

PC2. add glass beads or small aggregates to road marking paints to improve the grip and provide light reflection and visibility

PC3. mix additives with road marking paints in the required proportions

PC4. cordon off the painted area till it is fully cured to ensure that no traffic or travellers tread the road till the paint is fully cured

PC5. assess the road marking coating and apply a second coat of paint , if required

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the importance of visibility and reflective properties of road marking paints

KU2. the role of glass beads or small aggregates in improving the grip and imparting reflection and visibility to road marking paints

KU3. the importance of mixing additives with road marking paints in the required proportions

KU4. the importance of cordoning off the painted area till it is fully cured

KU5. the need for assessing the requirement of a second coat of paint

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read job specifications and instructions printed on tools and equipment

GS2. write reports and maintain records as per company’s policy

GS3. communicate with colleagues in a pleasant, polite, calm and clear way

GS4. practise active listening to capture task requirements from the supervisor

GS5. plan the sequence of the work process

GS6. organise the materials and equipment required to do the work

GS7. ensure the delivery of quality work as per the agreed timeline

GS8. solve work-related problems like clogging of blasting hose, helper shortage, wet paint, unavailability of PPE, etc.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Apply road marking paint	**15**	**35**	**-**	**-**
PC1. analyse the effects of visibility and reflective properties of road marking paints	-	-	-	-
PC2. add glass beads or small aggregates to road marking paints to improve the grip and provide light reflection and visibility	-	-	-	-
PC3. mix additives with road marking paints in the required proportions	-	-	-	-
PC4. cordon off the painted area till it is fully cured to ensure that no traffic or travellers tread the road till the paint is fully cured	-	-	-	-
PC5. assess the road marking coating and apply a second coat of paint , if required	-	-	-	-
NOS Total	**15**	**35**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	PCS/N5113
NOS Name	Perform Road Marking
Sector	Paints and Coatings
Sub-Sector	Application
Occupation	Industrial Paint Application
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Practical Skills for each Element/ PC.

The assessment for the theory part will be based on knowledge bank of questions created by the SSC. Assessment will be conducted for all compulsory NOS and where applicable on the selected elective/ option NOS/ set of NOS.

Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).

Individual assessment agencies will create unique evaluations for practical skill for every student at each examination/ training center based on these criteria.

To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.

In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Minimum Aggregate Passing % at QP Level : 60

(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Minimum Passing % at NOS Level: 60

(**Please note**: A Trainee must score the minimum percentage for each NOS separately as well as on the QP as a whole.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
PCS/N5110.Prepare to paint the substrate	15	35	-	-	50	30
PCS/N9901.Co-ordinate with colleagues and customers	15	35	-	-	50	10
PCS/N9902.Maintain standards of product/ service quality	15	35	-	-	50	10
PCS/N9903.Maintain OH&S standards and follow environmental norms	15	35	-	-	50	20
Total	**60**	**140**	**-**	**-**	**200**	**70**

Elective: 1 PCS/N5111 : Paint the substrate.

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
PCS/N5111.Paint the substrate	15	35	-	-	50	30
Total	**15**	**35**	**0**	**0**	**50**	**30**

Elective: 2 PCS/N5112 : Perform Floor Coating

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
PCS/N5112.Perform Floor Coating	15	35	-	-	50	30
Total	**15**	**35**	**0**	**0**	**50**	**30**

Elective: 3 PCS/N5113 : Perform Road Marking

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
PCS/N5113.Perform Road Marking	15	35	-	-	50	30
Total	**15**	**35**	**0**	**0**	**50**	**30**

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
NOS	National Occupational Standard(s)
NSQF	National Qualifications Skills Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training

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 similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
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 (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) 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 (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 qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by 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 a 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 quality of performance required.
Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.

Organisational Context	Organisational context includes the way the organisation 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 (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment 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.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.
Sector	The sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct sub set of the economy whose components share similar characteristics and interests.
Sub-Sector	The 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 similar/ related set of functions in the industry.
Job Role	The job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
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 (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standard	National Occupational Standard(s) (NOS) are occupational standards that apply uniquely in the Indian context.

Qualifications Pack (QP)	QP comprises the set of OSs, together with the educational, training, and other criteria required to perform a job role. A QP assigned an unique Qualifications Pack code.
Unit Code	Unit code is an unique identifier for an Occupational Standard, which is denoted by 'N'.
Unit Title	The unit title gives a clear overall statement about what the incumbent should be able to do.
Description	The 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	The scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function, which has a critical impact on the quality of performance required.
Knowledge and Understanding	Knowledge and Understanding (KU) are statements that together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation 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 (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment 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.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.