Water Resource Coordinator

Electives: Watershed/ Springshed/ Groundwater

QP Code: AGR/Q6606

Version: 2.0

NSQF Level: 4.5

Agriculture Skill Council of India || 6th Floor, GNG Tower, Plot No. 10, Sector -44, Gurgaon Haryana-122004 || email:shrinkhala@asci-india.com

Contents

AGR/Q6606: Water Resource Coordinator

Brief Job Description

A Water Resource Coordinator is responsible for coordinating water resource development projects, building the technical capacities of water resource assistants, community mobilizers, and para geo-hydrologists. The individual is also responsible for project monitoring and reporting. The person guides in the planning and implementation of watershed/ springshed/ groundwater resource planning and development.

Personal Attributes

The individual must have strong management and organizational skills. The person must have attention to detail, problem-solving skills and excellent written and verbal communication skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. AGR/N6644: Support in managing the water resource development projects and teams

2. AGR/N6637: Build technical capacities of water resource assistants, community mobilizers and para geo-hydrologists

3. AGR/N6646: Perform project monitoring and reporting

4. AGR/N9903: Maintain health and safety at the workplace

5. DGT/VSQ/N0103: Employability Skills (90 Hours)

Electives(mandatory to select at least one):

Elective 1: Watershed

Specialization in Watershed

1. AGR/N6647: Guide in watershed planning and implementation

Elective 2: Springshed

Specialization in Springshed

1. AGR/N6648: Guide in springshed planning and implementation

Elective 3: Groundwater

Specialization in Groundwater

1. AGR/N6649: Guide in the planning and implementation of groundwater resource development

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
Country	India
NSQF Level	4.5
Credits	18
Aligned to NCO/ISCO/ISIC Code	NCO-2015/2142.1000
Minimum Educational Qualification & Experience	Completed 1st year of UG (UG Certificate) OR Pursuing 1st year of UG (and continuous education) OR Pursuing 3rd year of 3-year diploma after 10th (and continuous education) OR Completed 3-year diploma (after 10th) OR Completed 2nd year diploma after 12th OR Pursuing 2nd year of 2-year diploma after 12th (and continuous education) OR Previous relevant Qualification of NSQF Level (3.5) (and with minimum education as 8th grade pass) with 3 Years of experience in the relevant field OR Previous relevant Qualification of NSQF Level (4) and with minimum education as 8th grade pass with 1.5 years of experience)
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA

Minimum Job Entry Age	21 Years
Last Reviewed On	NA
Next Review Date	29/03/2026
NSQC Approval Date	29/03/2023
Version	2.0
Reference code on NQR	QG-4.5-AG-00379-2023-V1-ASCI
NQR Version	1

AGR/N6644: Support in managing the water resource development projects and teams

Description

This OS unit is about providing support to the field teams to execute water resource development projects.

Scope

The scope covers the following :

- Support in managing the water resource development teams
- Handhold the team and project implementing committees

Elements and Performance Criteria

Support in managing the water resource development teams

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

PC1. allocate work responsibilities to water resource assistants, community mobilizers, para geo-hydrologists, facilitators, etc.

PC2. plan the schedule of work for team members to be carried out periodically

PC3. identify the training needs of team members based on their job role

PC4. organize training and exposure visits for team members to enhance their knowledge, skills, and attitude

PC5. conduct periodic team meetings to plan and review work

PC6. evaluate the performance of team members periodically and support them to improve their performance

PC7. carry out the administrative functions, such as maintaining team member attendance and leave records, giving different kinds of approvals, etc.

PC8. identify and resolve conflicts among the team members

Handhold the team and project implementing committees

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

PC9. execute the formal processes and procedures laid down by the project

PC10. ensure the transparency of processes, plan, and achievement in physical and financial terms in the project

PC11. facilitate the visits of various stakeholders, such as funding agencies, government officials, etc.

PC12. organize learning workshops and events for the team members and committee members

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. effective project management practices

KU2. different types of available maps, their source, and how to read them

KU3. how to prepare composite maps

KU4. different methods of data analysis and the tools required

KU5. different methods of impact assessment

KU6. different formats and templates of water budgeting

KU7. how to draw graphs

KU8. the use of relevant software tools and mobile applications

KU9. the process of allocating work responsibilities to water resource assistants, community mobilizers, para geo-hydrologists, facilitators, etc.

KU10. how to plan the work schedule for team members

KU11. the importance of identifying the training needs of team members based on their job role and organizing training and exposure visits for them to enhance their knowledge, skills, and attitude

KU12. the importance of reviewing work through regular team meetings

KU13. the importance of evaluating the performance of team members periodically and supporting them to improve their performance

KU14. the relevant administrative functions, such as maintaining team member attendance and leave records

KU15. the recommended conflict resolution practices to be followed to resolve conflict among team members

KU16. the importance of ensuring the transparency of processes, plan, and achievement in physical and financial terms in the project

KU17. the requirement of visits from various stakeholders, such as funding agencies, government officials, etc.

KU18. the process of organizing learning workshops and events for the team members and committee members

Generic Skills (GS)

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

GS1. maintain work-related notes and records

GS2. communicate clearly and politely with co-workers and clients

GS3. read the relevant literature to get information about the latest developments in the field of work

GS4. plan and prioritize tasks to ensure timely completion

GS5. take quick decisions to deal with workplace emergencies/ accidents

GS6. listen attentively to understand the information/ instructions being shared by the speaker

GS7. identify possible disruptions to work and take appropriate preventive measures

GS8. coordinate with co-workers to achieve work objectives

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Support in managing the water resource development teams	**15**	**22**	**-**	**15**
PC1. allocate work responsibilities to water resource assistants, community mobilizers, para geo-hydrologists, facilitators, etc.	-	-	-	-
PC2. plan the schedule of work for team members to be carried out periodically	-	-	-	-
PC3. identify the training needs of team members based on their job role	-	-	-	-
PC4. organize training and exposure visits for team members to enhance their knowledge, skills, and attitude	-	-	-	-
PC5. conduct periodic team meetings to plan and review work	-	-	-	-
PC6. evaluate the performance of team members periodically and support them to improve their performance	-	-	-	-
PC7. carry out the administrative functions, such as maintaining team member attendance and leave records, giving different kinds of approvals, etc.	-	-	-	-
PC8. identify and resolve conflicts among the team members	-	-	-	-
Handhold the team and project implementing committees	**15**	**18**	**-**	**15**
PC9. execute the formal processes and procedures laid down by the project	-	-	-	-
PC10. ensure the transparency of processes, plan, and achievement in physical and financial terms in the project	-	-	-	-
PC11. facilitate the visits of various stakeholders, such as funding agencies, government officials, etc.	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. organize learning workshops and events for the team members and committee members	-	-	-	-
NOS Total	**30**	**40**	**-**	**30**

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6644
NOS Name	Support in managing the water resource development projects and teams
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4.5
Credits	3
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

AGR/N6637: Build technical capacities of water resource assistants, community mobilizers and para geo-hydrologists

Description

This OS unit is about building the capabilities of the water resource assistants, community mobilizers and para geo-hydrologists.

Scope

The scope covers the following :

- Assist in preparing for the training
- Deliver the training

Elements and Performance Criteria

Assist in preparing for the training

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

PC1. conduct a need assessment in the learners' project areas

PC2. assist in preparing the training modules and calendar

PC3. assist in preparing the training material, e.g. presentations, posters, reference booklets, etc.

PC4. ensure appropriate arrangements for the training, e.g. audio-visual aids, projector, training hall, seating arrangement, stationery, whiteboard, chart paper, refreshments, and appropriate health and safety facilities

PC5. liaise with the relevant stakeholders, such as line department officials and panchayat representatives, to ensure appropriate arrangements for the training

Deliver the training

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

PC6. mobilize the learners and organize them into batches for the training

PC7. conduct training for the learners, following an appropriate training method, such as classroom training or field demonstration

PC8. ensure to take feedback from the cadre after training to identify the scope of improvement

PC9. maintain the relevant evidence concerning the delivery of training, e.g. participant registration, photographs, bills, etc.

PC10. prepare the training report and submit it to the relevant authority

PC11. ensure regular interaction with the learners virtually to resolve any issues experienced after the training

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the principles of pedagogy, including how to engage with the learners, such as ice-breakers

KU2.   the importance of determining the role and background of learners

KU3.   the relevant health and safety facilities required for training, such as first aid box, fire extinguishers, etc.

KU4.   the importance of selecting the appropriate training material according to the learners

KU5.   different formats and templates for various forms and reports

KU6.   the importance and process of conducting a need assessment in the learners project areas

KU7.   the process of preparing the training modules, training calendar and training material

KU8.   the appropriate arrangements required for the delivery of training, such as audio-visual aids, projector, training hall, seating arrangement, stationery, health and safety facilities, etc.

KU9.   the requirement of liaising with the relevant stakeholders, such as line department officials and panchayat representatives, to make appropriate arrangements for the training

KU10.   how to mobilize learners and organize them into batches for the training

KU11.   different methods of conducting training, such as classroom training or field demonstrations

KU12.   the importance and process of taking feedback from the cadre to identify the scope of improvement in training programs

KU13.   the importance of recording the evidence of training, e.g. participant registration, photographs, bills, etc.

KU14.   how to prepare a training report

KU15.   the importance of regularly interacting with the learners to resolve any issues they experience after the training and the benefit of doing it virtually

Generic Skills (GS)

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

GS1.   maintain work-related notes and records

GS2.   communicate clearly and politely with co-workers and clients

GS3.   read the relevant literature to get information about the latest developments in the field of work

GS4.   plan and prioritize tasks to ensure timely completion

GS5.   coordinate with co-workers to achieve work objectives

GS6.   listen attentively to understand the information/ instructions being shared by the speaker

GS7.   identify possible disruptions to work and take appropriate preventive measures

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Assist in preparing for the training	**14**	**18**	**-**	**14**
PC1. conduct a need assessment in the learners' project areas	-	-	-	-
PC2. assist in preparing the training modules and calendar	-	-	-	-
PC3. assist in preparing the training material, e.g. presentations, posters, reference booklets, etc.	-	-	-	-
PC4. ensure appropriate arrangements for the training, e.g. audio-visual aids, projector, training hall, seating arrangement, stationery, whiteboard, chart paper, refreshments, and appropriate health and safety facilities	-	-	-	-
PC5. liaise with the relevant stakeholders, such as line department officials and panchayat representatives, to ensure appropriate arrangements for the training	-	-	-	-
Deliver the training	**16**	**22**	**-**	**16**
PC6. mobilize the learners and organize them into batches for the training	-	-	-	-
PC7. conduct training for the learners, following an appropriate training method, such as classroom training or field demonstration	-	-	-	-
PC8. ensure to take feedback from the cadre after training to identify the scope of improvement	-	-	-	-
PC9. maintain the relevant evidence concerning the delivery of training, e.g. participant registration, photographs, bills, etc.	-	-	-	-
PC10. prepare the training report and submit it to the relevant authority	-	-	-	-
PC11. ensure regular interaction with the learners virtually to resolve any issues experienced after the training	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	**30**	**40**	**-**	**30**

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6637
NOS Name	Build technical capacities of water resource assistants, community mobilizers and para geo-hydrologists
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4.5
Credits	3
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

AGR/N6646: Perform project monitoring and reporting

Description

This OS unit is about performing project monitoring and reporting with respect to the progress in water resource planning and implementation.

Scope

The scope covers the following :

- Monitor the project regularly
- Report the project progress

Elements and Performance Criteria

Monitor the project regularly

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

PC1. design appropriate formats, templates and frameworks to conduct regular monitoring

PC2. conduct regular monitoring to ensure good quality implementation of physical structures

PC3. monitor the physical and financial progress of the project, based on the project milestone and budget

PC4. monitor the project spending to ensure it is according to the project budget

PC5. monitor and analyse the performance of field functionaries

PC6. apply necessary changes in program design, capacity building and other areas based on the feedback from field functionaries

Report the project progress

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

PC7. establish the prescribed record-keeping system to maintain the project records

PC8. ensure to take the relevant data/report(s) from the field functionaries

PC9. prepare the periodic physical and financial reports and submit them to the relevant authority

PC10. establish a system for monitoring the project impact and prepare the project impact report

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the appropriate templates, formats and frameworks for monitoring and reporting project progress

KU2. different ways of conducting IEC activities and the materials used

KU3. project milestones, budget and applicable Key Performance Indicators (KPIs)

KU4. technical specifications of different water conservation structures

KU5. different institutions and mechanisms of governance

KU6. different frameworks for assessing the performance of field functionaries and ways of encouraging them

KU7. use of relevant monitoring and reporting software tools and mobile applications, such as MIS, GIS-based tools, etc.

KU8. the importance of conducting regular monitoring to ensure good quality implementation of physical structures

KU9. the importance of monitoring the physical and financial progress of the project

KU10. relevant mechanisms to monitor and analyze the performance of field functionaries

KU11. the importance of making appropriate changes in the program design, capacity building and other areas based on the feedback from field functionaries

KU12. the appropriate record-keeping system to maintain the project records

KU13. the relevant data/report(s) to be taken from field functionaries

KU14. the process of preparing the periodic physical and financial reports and submitting them to the relevant authority

KU15. the importance of establishing a system for monitoring the project impact

KU16. how to prepare the project impact report

KU17. the benefits and different types of water harvesting, e.g. rooftop water harvesting and surface runoff harvesting

Generic Skills (GS)

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

GS1. maintain work-related notes and records

GS2. communicate clearly and politely with co-workers and clients

GS3. read the relevant literature to get information about the latest developments in the field of work

GS4. plan and prioritize tasks to ensure timely completion

GS5. listen attentively to understand the information/ instructions being shared by the speaker

GS6. coordinate with co-workers to achieve work objectives

GS7. evaluate all possible solutions to a problem to select the best one

GS8. identify possible disruptions to work and take appropriate preventive measures

GS9. take quick decisions to deal with workplace emergencies/ accidents

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Monitor the project regularly	**18**	**24**	**-**	**18**
PC1. design appropriate formats, templates and frameworks to conduct regular monitoring	-	-	-	-
PC2. conduct regular monitoring to ensure good quality implementation of physical structures	-	-	-	-
PC3. monitor the physical and financial progress of the project, based on the project milestone and budget	-	-	-	-
PC4. monitor the project spending to ensure it is according to the project budget	-	-	-	-
PC5. monitor and analyse the performance of field functionaries	-	-	-	-
PC6. apply necessary changes in program design, capacity building and other areas based on the feedback from field functionaries	-	-	-	-
Report the project progress	**12**	**16**	**-**	**12**
PC7. establish the prescribed record-keeping system to maintain the project records	-	-	-	-
PC8. ensure to take the relevant data/report(s) from the field functionaries	-	-	-	-
PC9. prepare the periodic physical and financial reports and submit them to the relevant authority	-	-	-	-
PC10. establish a system for monitoring the project impact and prepare the project impact report	-	-	-	-
NOS Total	**30**	**40**	**-**	**30**

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6646
NOS Name	Perform project monitoring and reporting
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4.5
Credits	3
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

AGR/N9903: Maintain health and safety at the workplace

Description

This OS is about maintaining health and safety of self and other co-workers at the workplace

Scope

The scope covers the following :

- Maintain personal hygiene
- Maintain clean and safe workplace
- Administer appropriate emergency procedures

Elements and Performance Criteria

Maintain personal hygiene

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

PC1. wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals

PC2. wash the worn clothes with soap and sun dry before use next time

PC3. ensure the face is covered with mask or three layers of cloth-piece

PC4. follow the workplace sanitization norms including distancing from sick people

Maintain clean and safe workplace

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

PC5. carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor

PC6. wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy

PC7. follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards

PC8. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices

PC9. sanitize equipment, tools and machinery before and after use

PC10. use equipment and materials safely and correctly and return the same to designated storage after use

PC11. dispose waste safely and correctly in the designated area

PC12. recognize risks to bystanders and take required action to reduce the risks

PC13. work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed

PC14. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger

PC15. follow government / workplace advisories incase of outbreak of any disease/disaster

Administer appropriate emergency procedures

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

PC16. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements

PC17. use emergency equipment in accordance with manufacturer's specifications and workplace requirements

PC18. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques

PC19. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate

PC20. report details of first aid administered in accordance with workplace procedures

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. relevant legislation, standards, policies, and procedures at work

KU2. relevant health and safety requirements applicable to the work environment

KU3. own job role and responsibilities and sources of information pertaining to work

KU4. who to approach for support in order to obtain work related information, clarifications and support

KU5. importance of following health, hygiene, safety and quality standards and the impact of not following the standards on consumers and the business

KU6. personal hygiene and fitness requirement

KU7. importance of sanitization of the workplace

KU8. types of Personal Protective Equipment (PPE) required at the workplace and their importance

KU9. the correct and safe way to use materials and equipment required for the work

KU10. the importance of good housekeeping at the workplace

KU11. safe waste disposal methods

KU12. methods for minimizing environmental damage during work

KU13. the risks to health and safety including contagious diseases and the measures to be taken to control those risks in the area of work

KU14. workplace procedures and requirements for the prevention and treatment of workplace injuries/illnesses.

KU15. basic emergency first aid procedure

KU16. local emergency services

KU17. why accidents, incidents and problems should be reported and the appropriate actions to be taken

Generic Skills (GS)

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

GS1. record the data as per the requirement

GS2. report problems to the appropriate personnel in a timely manner

GS3. read instruction manual for hand tool and equipments

GS4. communicate clearly and effectively with co-workers, and other stakeholders

GS5. comprehend information shared by senior people and experts

GS6. make decisions pertaining to personal hygiene and safety

GS7. schedule daily activities and draw up priorities

GS8. manage relationships with co-workers, manager and other stakeholders

GS9. assess situation and identify appropriate control measures

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain personal hygiene	**10**	**5**	**-**	**10**
PC1. wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals	-	-	-	-
PC2. wash the worn clothes with soap and sun dry before use next time	-	-	-	-
PC3. ensure the face is covered with mask or three layers of cloth-piece	-	-	-	-
PC4. follow the workplace sanitization norms including distancing from sick people	-	-	-	-
Maintain clean and safe workplace	**15**	**15**	**-**	**15**
PC5. carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor	-	-	-	-
PC6. wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy	-	-	-	-
PC7. follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards	-	-	-	-
PC8. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices	-	-	-	-
PC9. sanitize equipment, tools and machinery before and after use	-	-	-	-
PC10. use equipment and materials safely and correctly and return the same to designated storage after use	-	-	-	-
PC11. dispose waste safely and correctly in the designated area	-	-	-	-
PC12. recognize risks to bystanders and take required action to reduce the risks	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed	-	-	-	-
PC14. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger	-	-	-	-
PC15. follow government / workplace advisories incase of outbreak of any disease/disaster	-	-	-	-
Administer appropriate emergency procedures	**15**	**5**	**-**	**10**
PC16. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements	-	-	-	-
PC17. use emergency equipment in accordance with manufacturer's specifications and workplace requirements	-	-	-	-
PC18. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques	-	-	-	-
PC19. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	-	-	-	-
PC20. report details of first aid administered in accordance with workplace procedures	-	-	-	-
NOS Total	**40**	**25**	**-**	**35**

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N9903
NOS Name	Maintain health and safety at the workplace
Sector	Agriculture
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	1
Version	4.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

DGT/VSQ/N0103: Employability Skills (90 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

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

PC1. understand the significance of employability skills in meeting the current job market requirement and future of work

PC2. identify and explore learning and employability relevant portals

PC3. research about the different industries, job market trends, latest skills required and the available opportunities

Constitutional values – Citizenship

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

PC4. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.

PC5. follow environmentally sustainable practices

Becoming a Professional in the 21st Century

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

PC6. recognize the significance of 21st Century Skills for employment

PC7. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

PC8. adopt a continuous learning mindset for personal and professional development

Basic English Skills

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

PC9. use basic English for everyday conversation in different contexts, in person and over the telephone

PC10. read and understand routine information, notes, instructions, mails, letters etc. written in English

PC11. write short messages, notes, letters, e-mails etc. in English

Career Development & Goal Setting

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

PC12. identify career goals based on the skills, interests, knowledge, and personal attributes

PC13. prepare a career development plan with short- and long-term goals

Communication Skills

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

PC14. follow verbal and non-verbal communication etiquette while communicating in professional and public settings

PC15. use active listening techniques for effective communication

PC16. communicate in writing using appropriate style and format based on formal or informal requirements

PC17. work collaboratively with others in a team

Diversity & Inclusion

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

PC18. communicate and behave appropriately with all genders and PwD

PC19. escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

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

PC20. identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.

PC21. carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook

PC22. identify common components of salary and compute income, expenses, taxes, investments etc

PC23. identify relevant rights and laws and use legal aids to fight against legal exploitation

Essential Digital Skills

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

PC24. operate digital devices and use their features and applications securely and safely

PC25. carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.

PC26. display responsible online behaviour while using various social media platforms

PC27. create a personal email account, send and process received messages as per requirement

PC28. carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications

PC29. utilize virtual collaboration tools to work effectively

Entrepreneurship

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

PC30. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research

PC31. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion

PC32. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

Customer Service

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

PC33. identify different types of customers and ways to communicate with them

PC34. identify and respond to customer requests and needs in a professional manner

PC35. use appropriate tools to collect customer feedback

PC36. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC37. create a professional Curriculum vitae (Résumé)

PC38. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively

PC39. apply to identified job openings using offline /online methods as per requirement

PC40. answer questions politely, with clarity and confidence, during recruitment and selection

PC41. identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills and different learning and employability related portals

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

KU4. Twenty first (21st) century skills and their importance

KU5. how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up

KU6. importance of career development and setting long- and short-term goals

KU7. about effective communication

KU8. POSH Act

KU9. Gender sensitivity and inclusivity

KU10. different types of financial institutes, products, and services

KU11. components of salary and how to compute income and expenditure

KU12. importance of maintaining safety and security in offline and online financial transactions

KU13. different legal rights and laws

KU14. different types of digital devices and the procedure to operate them safely and securely

KU15. how to create and operate an e- mail account

KU16. use applications such as word processors, spreadsheets etc.

KU17. how to identify business opportunities

KU18. types and needs of customers

KU19. how to apply for a job and prepare for an interview

KU20. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

GS1. read and write different types of documents/instructions/correspondence in English and other languages

GS2. communicate effectively using appropriate language in formal and informal settings

GS3. behave politely and appropriately with all to maintain effective work relationship

GS4. how to work in a virtual mode, using various technological platforms

GS5. perform calculations efficiently

GS6. solve problems effectively

GS7. pay attention to details

GS8. manage time efficiently

GS9. maintain hygiene and sanitization to avoid infection

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	**1**	**1**	**-**	**-**
PC1. understand the significance of employability skills in meeting the current job market requirement and future of work	-	-	-	-
PC2. identify and explore learning and employability relevant portals	-	-	-	-
PC3. research about the different industries, job market trends, latest skills required and the available opportunities	-	-	-	-
Constitutional values – Citizenship	**1**	**1**	**-**	**-**
PC4. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC5. follow environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	**1**	**3**	**-**	**-**
PC6. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC7. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
PC8. adopt a continuous learning mindset for personal and professional development	-	-	-	-
Basic English Skills	**3**	**4**	**-**	**-**
PC9. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC11. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Career Development & Goal Setting	**1**	**2**	**-**	**-**
PC12. identify career goals based on the skills, interests, knowledge, and personal attributes	-	-	-	-
PC13. prepare a career development plan with short- and long-term goals	-	-	-	-
Communication Skills	**2**	**2**	**-**	**-**
PC14. follow verbal and non-verbal communication etiquette while communicating in professional and public settings	-	-	-	-
PC15. use active listening techniques for effective communication	-	-	-	-
PC16. communicate in writing using appropriate style and format based on formal or informal requirements	-	-	-	-
PC17. work collaboratively with others in a team	-	-	-	-
Diversity & Inclusion	**1**	**1**	**-**	**-**
PC18. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC19. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	**2**	**3**	**-**	**-**
PC20. identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.	-	-	-	-
PC21. carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC23. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Essential Digital Skills	**3**	**5**	**-**	**-**
PC24. operate digital devices and use their features and applications securely and safely	-	-	-	-
PC25. carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.	-	-	-	-
PC26. display responsible online behaviour while using various social media platforms	-	-	-	-
PC27. create a personal email account, send and process received messages as per requirement	-	-	-	-
PC28. carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications	-	-	-	-
PC29. utilize virtual collaboration tools to work effectively	-	-	-	-
Entrepreneurship	**2**	**3**	**-**	**-**
PC30. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC31. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC32. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
Customer Service	**1**	**2**	**-**	**-**
PC33. identify different types of customers and ways to communicate with them	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC34. identify and respond to customer requests and needs in a professional manner	-	-	-	-
PC35. use appropriate tools to collect customer feedback	-	-	-	-
PC36. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	**2**	**3**	**-**	**-**
PC37. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC38. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC39. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC40. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC41. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	**20**	**30**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0103
NOS Name	Employability Skills (90 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	5
Credits	3
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

AGR/N6647: Guide in watershed planning and implementation

Description

This OS unit is about guiding in the planning and implementation of watershed projects.

Scope

The scope covers the following :

- Arrange and analyze the relevant maps
- Guide in watershed planning and preparing the DPR
- Guide in the implementation

Elements and Performance Criteria

Arrange and analyze the relevant maps

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

PC1. arrange the relevant maps for analysis

PC2. analyze the relevant maps and record the findings for the team

PC3. ensure the correct demarcation of the watershed boundary on the toposheet and the calculation of watershed area on the toposheet

Guide in watershed planning and preparing the DPR

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

PC4. ensure the use of relevant maps in watershed planning

PC5. guide the field functionaries in conducting the field survey, selecting the appropriate site, and estimating the applicable costs for watershed planning

PC6. ensure the availability of the relevant types of data for preparing the DPR

PC7. supervise the detailed technical surveys, such as L-section, cross-section, and estimation of major water harvesting structures

PC8. ensure the assessment of water quality as per the applicable method

PC9. guide the compilation and analysis of relevant data for the preparation of DPR

PC10. guide in finalizing the design and structure and preparing the design estimates

PC11. ensure effective provisions for monitoring the physical and financial progress of the project and the impact of interventions on the underprivileged sections of the community

Guide in the implementation of watershed project

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

PC12. ensure the field functionaries understand the DPR and it is presented to the community and watershed committee

PC13. guide the preparation of the seasonal calendar for the implementation of watershed interventions

PC14. ensure effective worksite management, including work allotment and labour management

PC15. supervise the maintenance of relevant records, preparation of work completion report and payment sheet, and disbursement of wages

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the watershed concept, including the ridge area, ridge line, drainage line, etc.

KU2. the geological and hydrogeological mapping

KU3. the identification and delineation of recharge and discharge area

KU4. the process of compiling data and preparing a DPR

KU5. the significance of geohydrology in watershed planning

KU6. the procedures related to socio-technical concepts and practices in participatory and integrated watershed management

KU7. the relevant watershed planning exercises followed by the organization

KU8. the soil and water conservation technologies, social mobilization tools, research methodologies, and the appropriate watershed planning tools

KU9. the basics of handling teams of different expertise

KU10. communication and linkage-building expertise

KU11. the use of relevant maps for analysis and watershed planning

KU12. the importance of ensuring the correct demarcation of the watershed boundary on the toposheet and the calculation of watershed area on the toposheet

KU13. the process of conducting the field survey, selecting the appropriate site, and estimating the applicable costs for watershed planning

KU14. the relevant types of data required for preparing the DPR and how to prepare a DPR

KU15. how to conduct detailed technical surveys, such as L-section, cross-section, and estimation of major water harvesting structures

KU16. the process of assessing the water quality for watershed planning

KU17. the importance of monitoring the physical and financial progress of the project and the impact of interventions on the underprivileged sections of the community

KU18. the importance of explaining the DPR to field functionaries and taking feedback from the community and watershed committee

KU19. the process of preparing the seasonal calendar for the implementation of watershed interventions

KU20. effective worksite management practices

KU21. the process of maintaining the relevant records, preparing the work completion report and payment sheet, and disbursing wages to field workers

Generic Skills (GS)

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

GS1. maintain work-related notes and records

GS2. communicate clearly and politely with co-workers and clients

GS3. read the relevant literature to get information about the latest developments in the field of work

GS4. plan and prioritize tasks to ensure timely completion

GS5. listen attentively to understand the information/ instructions being shared by the speaker

GS6. coordinate with co-workers to achieve work objectives

GS7. take quick decisions to deal with workplace emergencies/ accidents

GS8. identify possible disruptions to work and take appropriate preventive measures

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Arrange and analyze the relevant maps	**9**	**15**	**-**	**9**
PC1. arrange the relevant maps for analysis	-	-	-	-
PC2. analyze the relevant maps and record the findings for the team	-	-	-	-
PC3. ensure the correct demarcation of the watershed boundary on the toposheet and the calculation of watershed area on the toposheet	-	-	-	-
Guide in watershed planning and preparing the DPR	**11**	**10**	**-**	**11**
PC4. ensure the use of relevant maps in watershed planning	-	-	-	-
PC5. guide the field functionaries in conducting the field survey, selecting the appropriate site, and estimating the applicable costs for watershed planning	-	-	-	-
PC6. ensure the availability of the relevant types of data for preparing the DPR	-	-	-	-
PC7. supervise the detailed technical surveys, such as L-section, cross-section, and estimation of major water harvesting structures	-	-	-	-
PC8. ensure the assessment of water quality as per the applicable method	-	-	-	-
PC9. guide the compilation and analysis of relevant data for the preparation of DPR	-	-	-	-
PC10. guide in finalizing the design and structure and preparing the design estimates	-	-	-	-
PC11. ensure effective provisions for monitoring the physical and financial progress of the project and the impact of interventions on the underprivileged sections of the community	-	-	-	-
Guide in the implementation of watershed project	**10**	**15**	**-**	**10**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. ensure the field functionaries understand the DPR and it is presented to the community and watershed committee	-	-	-	-
PC13. guide the preparation of the seasonal calendar for the implementation of watershed interventions	-	-	-	-
PC14. ensure effective worksite management, including work allotment and labour management	-	-	-	-
PC15. supervise the maintenance of relevant records, preparation of work completion report and payment sheet, and disbursement of wages	-	-	-	-
NOS Total	**30**	**40**	**-**	**30**

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6647
NOS Name	Guide in watershed planning and implementation
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4.5
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

AGR/N6648: Guide in springshed planning and implementation

Description

This OS unit is about guiding in delineation, preparing the Detailed Project Report (DPR), and implementing the springshed interventions.

Scope

The scope covers the following :

- Arrange and analyze the relevant maps
- Guide in springshed planning and preparing the DPR
- Guide in the implementation

Elements and Performance Criteria

Arrange and analyze the relevant maps

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

PC1. arrange the relevant maps for analysis

PC2. analyze the maps and record the findings for the team

PC3. ensure the correct demarcation of springshed boundary and calculation of springshed area

Guide in springshed planning and preparing the DPR

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

PC4. ensure the use of appropriate maps in springshed planning

PC5. guide the field functionaries to ensure correct baseflow measurement, field survey, site selection, and cost estimation

PC6. ensure the availability of different types of data for the preparation of DPR

PC7. supervise the detailed technical surveys for spring chamber, catchment protection measures, diversion-based water distribution system, and estimation of different water conservation and distribution structures

PC8. ensure the assessment of water quality as per the prescribed procedure

PC9. guide the compilation and analysis of data for DPR preparation

PC10. guide in finalizing the design and structure and preparing the design estimates

PC11. ensure effective provisions for monitoring the physical and financial progress of the project and the impact of interventions on the underprivileged sections of the community

Guide in the implementation

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

PC12. ensure the field functionaries understand the DPR and it is presented to the community and springshed committee

PC13. supervise the preparation of the seasonal calendar for the implementation of springshed interventions

PC14. ensure effective worksite management, including layout marking, labour management, work allotment, measurements, etc.

PC15. supervise the maintenance of relevant records, verification of work completion, preparation of work completion report and payment sheet, and disbursement of wages

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the procedures related to socio-technical concepts and practices in participatory and integrated springshed management

KU2. the relevant springshed planning exercises followed by the organization

KU3. the soil and water conservation technologies, social mobilization tools, research methodologies, and the appropriate springshed planning tools

KU4. the basics of handling teams of different expertise

KU5. communication and linkage-building expertise

KU6. the relevant maps required for analysis and springshed planning

KU7. the importance of ensuring the correct demarcation of springshed boundary and calculation of springshed area

KU8. the importance of ensuring correct baseflow measurement, field survey, site selection, and cost estimation

KU9. different types of data required for the preparation of DPR for a springshed project

KU10. the process of preparing a DPR for a springshed project

KU11. the process of conducting detailed technical surveys for spring chamber, catchment protection measures, diversion-based water distribution system, and estimation of different water conservation and distribution structures

KU12. the process of assessing the water quality for springshed planning

KU13. the importance of monitoring the physical and financial progress of the project and the impact of interventions on the underprivileged sections of the community

KU14. the importance of presenting the DPR to the community and springshed committee

KU15. the preparation of the seasonal calendar for the implementation of springshed interventions

KU16. the relevant records to be maintained, such as the records concerning the verification of work completion, preparation of work completion report and payment sheet, and disbursement of wages

Generic Skills (GS)

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

GS1. maintain work-related notes and records

GS2. communicate clearly and politely with co-workers and clients

GS3. read the relevant literature to get information about the latest developments in the field of work

GS4. plan and prioritize tasks to ensure timely completion

GS5. listen attentively to understand the information/ instructions being shared by the speaker

GS6. coordinate with co-workers to achieve work objectives

GS7. take quick decisions to deal with workplace emergencies/ accidents

GS8. identify possible disruptions to work and take appropriate preventive measures

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Arrange and analyze the relevant maps	**11**	**15**	**-**	**10**
PC1. arrange the relevant maps for analysis	-	-	-	-
PC2. analyze the maps and record the findings for the team	-	-	-	-
PC3. ensure the correct demarcation of springshed boundary and calculation of springshed area	-	-	-	-
Guide in springshed planning and preparing the DPR	**10**	**13**	**-**	**11**
PC4. ensure the use of appropriate maps in springshed planning	-	-	-	-
PC5. guide the field functionaries to ensure correct baseflow measurement, field survey, site selection, and cost estimation	-	-	-	-
PC6. ensure the availability of different types of data for the preparation of DPR	-	-	-	-
PC7. supervise the detailed technical surveys for spring chamber, catchment protection measures, diversion-based water distribution system, and estimation of different water conservation and distribution structures	-	-	-	-
PC8. ensure the assessment of water quality as per the prescribed procedure	-	-	-	-
PC9. guide the compilation and analysis of data for DPR preparation	-	-	-	-
PC10. guide in finalizing the design and structure and preparing the design estimates	-	-	-	-
PC11. ensure effective provisions for monitoring the physical and financial progress of the project and the impact of interventions on the underprivileged sections of the community	-	-	-	-
Guide in the implementation	**9**	**12**	**-**	**9**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. ensure the field functionaries understand the DPR and it is presented to the community and springshed committee	-	-	-	-
PC13. supervise the preparation of the seasonal calendar for the implementation of springshed interventions	-	-	-	-
PC14. ensure effective worksite management, including layout marking, labour management, work allotment, measurements, etc.	-	-	-	-
PC15. supervise the maintenance of relevant records, verification of work completion, preparation of work completion report and payment sheet, and disbursement of wages	-	-	-	-
NOS Total	**30**	**40**	**-**	**30**

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6648
NOS Name	Guide in springshed planning and implementation
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4.5
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

AGR/N6649: Guide in the planning and implementation of groundwater resource development

Description

This OS unit is about guiding in aquifer mapping, preparing the Detailed Project Report (DPR), and implementing the groundwater resource development interventions.

Scope

The scope covers the following :

- Arrange and analyze the relevant maps
- Guide in groundwater resource development planning
- Assist and guide in preparing the DPR
- Assist and guide in the implementation

Elements and Performance Criteria

Arrange and analyze the relevant maps

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

PC1. arrange the relevant maps, such as the aquifer, geological, cadastral, spatial, and other thematic maps for analysis

PC2. analyze the water table contour lines

Guide in groundwater resource development planning

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

PC3. ensure the use of different maps for groundwater resource development planning

PC4. supervise the process of field survey, site selection, and cost estimation

PC5. ensure the assessment of water quality as per the prescribed procedure

PC6. guide the process of carrying out the well inventory

PC7. guide in finalizing the design and structure and preparing the design estimates

PC8. ensure effective provisions for monitoring the physical and financial progress of the project and the impact of interventions on the underprivileged sections of the community

Guide in preparing the DPR

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

PC9. ensure the availability of different types of data for the preparation of DPR

PC10. supervise the technical surveys for recharge and discharge structures, catchment protection measures, water distribution/ sharing system, and estimation of different water conservation and distribution structures

PC11. guide in the compilation and analysis of data for DPR preparation

Guide in the implementation

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

PC12. ensure the field functionaries understand the DPR and it is presented to the community and groundwater management committee or other relevant committees

PC13. guide the preparation of the seasonal calendar for the implementation of groundwater resource development interventions

PC14. guide the field functionaries in worksite management, i.e. layout marking, labour management, work allotment, measurements, etc.

PC15. guide the field functionaries in maintaining different records, such as the cashbook, ledger, stock register, attendance sheet, measurement book, etc.

PC16. assist in the verification of completion of work and prepare the work completion report

PC17. assist in the preparation of payment sheet and disbursement of wages

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the geological and hydrogeological mapping

KU2. the significance of geohydrology in groundwater resource planning

KU3. the procedures related to socio-technical concepts and practices in participatory and integrated groundwater resource management

KU4. the conjunctive use of water

KU5. the relevant groundwater resource development and planning exercises followed by the organization

KU6. the soil and water conservation technologies, social mobilization tools, research methodologies, and the appropriate groundwater resource development and planning tools

KU7. the basics of handling teams of different expertise and the appropriate linkage-building expertise

KU8. the relevant maps required for the analysis and groundwater resource development and planning, such as the aquifer, geological, cadastral, spatial and other thematic maps for analysis

KU9. the process of analyzing the water table contour lines

KU10. the process of conducting field surveys, site selection, and cost estimation for groundwater resource development and planning

KU11. the process of assessing the water quality for groundwater resource development and planning

KU12. the importance of monitoring the physical and financial progress of the project and the impact of interventions on the underprivileged sections of the community

KU13. the process of carrying out well inventory

KU14. the different types of data required for preparing a DPR and the process of preparing one

KU15. the process of conducting technical surveys for recharge and discharge structures, catchment protection measures, water distribution/ sharing system, and estimation of different water conservation and distribution structures

KU16. the importance of explaining the DPR and taking feedback from the community and groundwater management committee or other relevant committees

KU17. the preparation of the seasonal calendar for the implementation of groundwater resource development interventions

KU18. the effective worksite management practices

KU19. the different records to be maintained, such as the cashbook, ledger, stock register, attendance sheet, measurement book, etc.

KU20. the process of verifying the completion of work and preparing the work completion report

KU21. how to prepare the payment sheet and disbursement of wages

Generic Skills (GS)

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

GS1. maintain work-related notes and records

GS2. communicate clearly and politely with co-workers and clients

GS3. read the relevant literature to get information about the latest developments in the field of work

GS4. plan and prioritize tasks to ensure timely completion

GS5. listen attentively to understand the information/ instructions being shared by the speaker

GS6. coordinate with co-workers to achieve work objectives

GS7. take quick decisions to deal with workplace emergencies/ accidents

GS8. identify possible disruptions to work and take appropriate preventive measures

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Arrange and analyze the relevant maps	**7**	**9**	**-**	**6**
PC1. arrange the relevant maps, such as the aquifer, geological, cadastral, spatial, and other thematic maps for analysis	-	-	-	-
PC2. analyze the water table contour lines	-	-	-	-
Guide in groundwater resource development planning	**7**	**12**	**-**	**7**
PC3. ensure the use of different maps for groundwater resource development planning	-	-	-	-
PC4. supervise the process of field survey, site selection, and cost estimation	-	-	-	-
PC5. ensure the assessment of water quality as per the prescribed procedure	-	-	-	-
PC6. guide the process of carrying out the well inventory	-	-	-	-
PC7. guide in finalizing the design and structure and preparing the design estimates	-	-	-	-
PC8. ensure effective provisions for monitoring the physical and financial progress of the project and the impact of interventions on the underprivileged sections of the community	-	-	-	-
Guide in preparing the DPR	**8**	**10**	**-**	**9**
PC9. ensure the availability of different types of data for the preparation of DPR	-	-	-	-
PC10. supervise the technical surveys for recharge and discharge structures, catchment protection measures, water distribution/ sharing system, and estimation of different water conservation and distribution structures	-	-	-	-
PC11. guide in the compilation and analysis of data for DPR preparation	-	-	-	-
Guide in the implementation	**8**	**9**	**-**	**8**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. ensure the field functionaries understand the DPR and it is presented to the community and groundwater management committee or other relevant committees	-	-	-	-
PC13. guide the preparation of the seasonal calendar for the implementation of groundwater resource development interventions	-	-	-	-
PC14. guide the field functionaries in worksite management, i.e. layout marking, labour management, work allotment, measurements, etc.	-	-	-	-
PC15. guide the field functionaries in maintaining different records, such as the cashbook, ledger, stock register, attendance sheet, measurement book, etc.	-	-	-	-
PC16. assist in the verification of completion of work and prepare the work completion report	-	-	-	-
PC17. assist in the preparation of payment sheet and disbursement of wages	-	-	-	-
NOS Total	**30**	**40**	**-**	**30**

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N6649
NOS Name	Guide in the planning and implementation of groundwater resource development
Sector	Agriculture
Sub-Sector	Forestry, Environment and Renewable Energy Management
Occupation	Watershed Management
NSQF Level	4.5
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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

2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.

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

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

5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

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

Minimum Aggregate Passing % at QP Level : 70

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

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N6644.Support in managing the water resource development projects and teams	30	40	0	30	100	25
AGR/N6637.Build technical capacities of water resource assistants, community mobilizers and para geo-hydrologists	30	40	0	30	100	25
AGR/N6646.Perform project monitoring and reporting	30	40	0	30	100	20
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	5
DGT/VSQ/N0103.Employability Skills (90 Hours)	20	30	-	-	50	5
Total	**150**	**175**	**-**	**125**	**450**	**80**

Elective: 1 Watershed

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N6647.Guide in watershed planning and implementation	30	40	0	30	100	20
Total	**30**	**40**	**-**	**30**	**100**	**20**

Elective: 2 Springshed

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N6648.Guide in springshed planning and implementation	30	40	0	30	100	20
Total	**30**	**40**	**-**	**30**	**100**	**20**

Elective: 3 Groundwater

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N6649.Guide in the planning and implementation of groundwater resource development	30	40	0	30	100	20
Total	**30**	**40**	**-**	**30**	**100**	**20**

Acronyms

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

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.