









# Assistant Drone Technician

QP Code: ELE/Q7004

Version: 1.0

NSQF Level: 3

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# Contents

ELE/Q7004: Assistant Drone Technician	3
Brief Job Description	3
Applicable National Occupational Standards (NOS)	3
Compulsory NOS	3
Qualification Pack (QP) Parameters	3
ELE/N7008: Theoretical Concept of Drone Technology	5
ELE/N7007: Practical Aspect of Drones and Simulation Techniques	10
ELE/N7009: Drone Testing and Maintenance	14
ELE/N9972: Communicate and coordinate effectively with others	20
DGT/VSQ/N0102: Employability Skills (60 Hours)	24
Assessment Guidelines and Weightage	31
Assessment Guidelines	
Assessment Weightage	31
Acronyms	33
Glossary	34









### **ELE/Q7004: Assistant Drone Technician**

### **Brief Job Description**

An Assistant Drone Technician conducts routine Maintenance, Troubleshoots, Bench Testing and Flying while ensuring adherence to standard working practices. The individuals in this job maintain, troubleshoots, test and fly drones of varying sizes that are used for various applications such as aerial photography & videography, transporting goods, firefighting, survey and mapping, powerline Inspection, Industrial Inspection, Emergency Operations etc.

#### **Personal Attributes**

The individual must have attention to detail, logical thinking, and ability to execute the Maintenance, Troubleshoots, Bench Testing and Flying activity as per client's requirement.

### **Applicable National Occupational Standards (NOS)**

### **Compulsory NOS:**

- 1. ELE/N7008: Theoretical Concept of Drone Technology
- 2. <u>ELE/N7007</u>: <u>Practical Aspect of Drones and Simulation Techniques</u>
- 3. ELE/N7009: Drone Testing and Maintenance
- 4. ELE/N9972: Communicate and coordinate effectively with others
- 5. DGT/VSQ/N0102: Employability Skills (60 Hours)

### **Qualification Pack (QP) Parameters**

Sector	Electronics
Sub-Sector	E-Mobility and Battery
Occupation	After Sale Support-EM&B
Country	India
NSQF Level	3
Credits	14
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8212.0400









Minimum Educational Qualification & Experience	10th grade pass with NA of experience OR 8th Class with 2 Years of experience Relevant Experience OR 8th grade pass with 2 years of NTC with NA of experience OR 9th grade pass with 1 Year of experience relevant experience			
Minimum Level of Education for Training in School	8th Class			
Pre-Requisite License or Training	NA			
Minimum Job Entry Age	18 Years			
Last Reviewed On	NA			
Next Review Date	23/06/2026			
NSQC Approval Date	23/06/2023			
Version	1.0			
Reference code on NQR	QG-03-EH-00575-2023-V1-ESSCI			
NQR Version	1.0			









### **ELE/N7008: Theoretical Concept of Drone Technology**

### **Description**

REMOTELY PILOTED AIRCRAFT (RPA)/ DRONE PILOT Training has a wide scope of Employability ranging from self-employment, contractual employment to Industrial jobs.

### Scope

The scope covers the following:

- Understanding of Laws and rules related to the technology.
- Learn about drone circuit and its component.
- Get to know about different type of Drones

#### **Elements and Performance Criteria**

#### Understanding of Ground Subjects involved in Drone Pilot Training

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

- **PC1.** Stakeholders of the Drone Technology & their laws behind the technology.
- PC2. Different type of Law regarding Drone Technology / The Drone Rules 2021
- **PC3.** Airspace Structure for the Drone Technology
- **PC4.** Basic principles of flight
- PC5. ATC procedures & Radio Telephony (non FRTOL)/ ATC procedures Intermediate

#### Different types of Drone Systems

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

- **PC6.** Fixed-wing Drone Operations and its Aerodynamics
- **PC7.** Rotorcraft Drone Operations and its Aerodynamics
- **PC8.** Hybrid Drone Operations and its Aerodynamics

#### Data Analysis and Check for Drone Systems

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

- **PC9.** Weather and Meteorology for Drone Technology
- PC10. Crew Resource Management, Instrument Flying and Weight & Balance for Drone Technology
- PC11. Performance of Drone
- **PC12.** Drone Equipment Maintenance (Assembling & Manufacturing)
- PC13. Risk Assessment & Analysis Safety Management/ Emergency Procedures
- PC14. Different payload, Installation and Utilization
- PC15. Intro to Drone Data & Analysis

#### Reporting to Superior

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

- PC16. Inform on the workload and completion status
- PC17. report work status through proper documentation as per organisational standards
- PC18. intimate the problems that cannot be resolved at field level with reason









### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Organisational policies on incentives and personnel management
- **KU2.** Importance of the individuals role in the workflow
- **KU3.** reporting structure followed in the organisation
- **KU4.** organization portfolio of products
- **KU5.** organizational policy on product's warranty and other terms and conditions
- **KU6.** Electronics, UAV parts and aerodynamic of behind drone technology
- **KU7.** Rules and Regulations by DGCA
- **KU8.** ATC Procedure and Radio Telephony techniques
- KU9. Understanding of Different Drone Types
- **KU10.** Weather and Metrological Conditions
- **KU11.** Drone Equipment Maintenance
- **KU12.** Understating of Payload and its utilization
- KU13. Learn Drone Data analysis
- **KU14.** Learn how to integrate simulator software and hardware
- **KU15.** Using Simulator Software for flying practice
- **KU16.** Pre flight and Post flight check drone flying
- **KU17.** Understand various flying maneuvers
- **KU18.** Learn Multiple Flying scenarios

### **Generic Skills (GS)**

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

- **GS1.** write common words/signs and set phrases used in the work
- **GS2.** Prepare checklists
- **GS3.** measure various dimensions as per task requirements
- **GS4.** perform arithmetic calculations of addition, subtraction, multiplication, and division processes
- **GS5.** read and interpret information (symbols, dimensions, terminology, dates etc.) given language
- **GS6.** read the relevant literature to get the latest updates about the work
- **GS7.** communicate politely and professionally
- **GS8.** listen attentively to understand the information being shared
- **GS9.** take quick decisions to deal with work emergencies or accidents
- **GS10.** identify possible disruptions to work and take appropriate preventive measures
- **GS11.** evaluate all possible solutions to a problem to select the best one









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Understanding of Ground Subjects involved in Drone Pilot Training	9	-	-	9
<b>PC1.</b> Stakeholders of the Drone Technology & their laws behind the technology.	2	-	-	2
PC2. Different type of Law regarding Drone Technology / The Drone Rules 2021	2	-	-	2
<b>PC3.</b> Airspace Structure for the Drone Technology	2	-	-	2
PC4. Basic principles of flight	2	-	-	2
PC5. ATC procedures & Radio Telephony (non FRTOL)/ ATC procedures Intermediate	1	-	-	1
Different types of Drone Systems	19	-	-	10
<b>PC6.</b> Fixed-wing Drone Operations and its Aerodynamics	6	-	-	3
<b>PC7.</b> Rotorcraft Drone Operations and its Aerodynamics	6	-	-	3
<b>PC8.</b> Hybrid Drone Operations and its Aerodynamics	7	-	-	4
Data Analysis and Check for Drone Systems	10	20	-	10
<b>PC9.</b> Weather and Meteorology for Drone Technology	1	1	-	1
<b>PC10.</b> Crew Resource Management, Instrument Flying and Weight & Balance for Drone Technology	1	2	-	1
PC11. Performance of Drone	1	3	-	1
PC12. Drone Equipment Maintenance (Assembling & Manufacturing)	1	3	-	1
PC13. Risk Assessment & Analysis - Safety Management/ Emergency Procedures	1	2	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. Different payload, Installation and Utilization	3	4	-	3
PC15. Intro to Drone Data & Analysis	2	5	-	2
Reporting to Superior	10	-	-	-
<b>PC16.</b> Inform on the workload and completion status	2	-	-	-
<b>PC17.</b> report work status through proper documentation as per organisational standards	3	-	-	-
<b>PC18.</b> intimate the problems that cannot be resolved at field level with reason	5	-	-	-
NOS Total	48	20	-	29









# **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N7008
NOS Name	Theoretical Concept of Drone Technology
Sector	Electronics
Sub-Sector	E-Mobility and Battery
Occupation	After Sale Support-EM&B
NSQF Level	3
Credits	3
Version	1.0
Last Reviewed Date	NA
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023









### **ELE/N7007: Practical Aspect of Drones and Simulation Techniques**

### **Description**

Understanding of Drone Simulation and its techniques

### Scope

The scope covers the following:

- Simulation setup for multiple Drones.
- How to Use Simulation Setup Effectively.
- Different techniques for usage of simulation setup

#### **Elements and Performance Criteria**

#### Practical Aspect of Drones and Simulation Techniques

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

- **PC1.** Understanding of Simulation Setup and its importance for the Drone Operator.
- **PC2.** Different Types of Drone Simulator and their usage
- **PC3.** Major components required for a Drone Simulator
- **PC4.** Setting up of Drone Simulator from scratch
- PC5. How to switch between different models and modes in a Drone Simulator
- **PC6.** Preflight check and starting up your Drone
- **PC7.** Preparation Cum Coordination for Flight
- PC8. Take off and Flight Stage
- **PC9.** Approach and Landing of a Drone Systems
- PC10. After Flight Checks
- PC11. Simulator Exercises

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Organizational policies on incentives and personnel management
- **KU2.** importance of the individuals role in the workflow
- **KU3.** reporting structure followed in the organization
- **KU4.** organization's portfolio of products
- **KU5.** organizational policy on product's warranty and other terms and conditions
- **KU6.** Learn how to integrate simulator software and hardware
- **KU7.** Using Simulator Software for flying practice
- KU8. Preflight and Postflight check drone flying
- **KU9.** Understand various flying maneuvers









- KU10. Learn Multiple Flying scenarios
- **KU11.** Emergency Procedures and abnormal Flying conditions.

### **Generic Skills (GS)**

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

- **GS1.** write common words/signs and set phrases used in the work
- **GS2.** prepare checklists, reports and fill out forms in local language or English/ Hindi maintain work related notes and records
- **GS3.** measure various dimensions as per task requirements
- **GS4.** perform arithmetic calculations of addition, subtraction, multiplication and division processes
- **GS5.** read and interpret information (symbols, dimensions, terminology, dates etc.) given language
- **GS6.** read the relevant literature to get the latest updates about the field of work
- **GS7.** communicate politely and professionally
- **GS8.** listen attentively to understand the information being shared
- **GS9.** take quick decisions to deal with work emergencies or accidents
- **GS10.** identify possible disruptions to work and take appropriate preventive measures
- **GS11.** evaluate all possible solutions to a problem to select the best one.









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Practical Aspect of Drones and Simulation Techniques	20	50	20	10
<b>PC1.</b> Understanding of Simulation Setup and its importance for the Drone Operator.	4	-	-	-
<b>PC2.</b> Different Types of Drone Simulator and their usage	4	-	-	2
<b>PC3.</b> Major components required for a Drone Simulator	4	-	-	3
<b>PC4.</b> Setting up of Drone Simulator from scratch	4	10	-	3
<b>PC5.</b> How to switch between different models and modes in a Drone Simulator	4	3	-	2
<b>PC6.</b> Preflight check and starting up your Drone	-	3	-	-
PC7. Preparation Cum Coordination for Flight	-	4	-	-
PC8. Take off and Flight Stage	-	5	3	-
<b>PC9.</b> Approach and Landing of a Drone Systems	-	5	3	-
PC10. After Flight Checks	<del>-</del>	5	4	-
PC11. Simulator Exercises	-	15	10	-
NOS Total	20	50	20	10









# **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N7007
NOS Name	Practical Aspect of Drones and Simulation Techniques
Sector	Electronics
Sub-Sector	E-Mobility and Battery
Occupation	After Sale Support-EM&B
NSQF Level	3
Credits	4
Version	1.0
Last Reviewed Date	NA
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023









### **ELE/N7009: Drone Testing and Maintenance**

### **Description**

This OS unit deals with how to repair a Drone and Flying Drone.

### Scope

The scope covers the following:

- Understanding the Drone related issues faced by the customer
- Performing repair and maintenance of the Drone
- Commissioning the Drone and Bench Testing
- Flying Testing and Parameters updates

#### **Elements and Performance Criteria**

#### Drone Troubleshooting, Repair & Maintenance and Testing

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

- **PC1.** Select relevant troubleshooting-instruction sheet, tools, equipment for the repair of the Drone
- **PC2.** Perform preliminary check-up of the Drone and evaluate the replacement or repair of modules
- **PC3.** Review recommended practices for switching on the Drone and the remote controller and standard work practices to disassemble the defective components
- **PC4.** Inspect the functional components of a drone thoroughly using required components
- PC5. Identify electronic components that are malfunctioning and need to be repaired / replaced
- **PC6.** Perform repair of the defective components as per company specified maintenance Guidelines
- **PC7.** Install repaired / fresh electronic components using appropriate tools and equipment
- **PC8.** Assemble the Drone components as per desirable industry practices
- **PC9.** Assess that the Drone is working effectively post repair and maintenance
- **PC10.** Perform standard safety checks of the Drone post repair and maintenance

#### **Drone Flying Testing and Activities**

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

- **PC11.** Perform a demo run of the Drone to ensure the proper functioning of Drone
- PC12. Perform all the Preflight checks as per Standard SOP
- PC13. Flying Exercises: Take off
- PC14. Flying Exercises: Hover
- **PC15.** Flying Exercises: Gentle Turns
- **PC16.** Flying Exercises: Medium and steep turns
- PC17. Flying Exercises: Level Out
- PC18. Flying Exercises: Disorientation and recovery









PC19. Flying Exercises: Climbing and Climbing turns

PC20. Flying Exercises: Descend and Descending turns

PC21. Flying Exercises: Circuit Flying

PC22. Flying Exercises: Abnormal/ Emergency Procedure

PC23. Flying Exercises: Practical Forced Landing

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Organizational policies on incentives and personnel management
- **KU2.** importance of the individual's role in the workflow
- **KU3.** reporting structure followed in the organization
- **KU4.** organization's portfolio of products
- **KU5.** organizational policy on product's warranty and other terms and conditions
- **KU6.** manufacturer guidelines for starting and shutting down the drone safely
- KU7. standard work practices for disassembling and assembling the Drone
- **KU8.** troubleshooting methods for various types of Drones
- **KU9.** inspection techniques and various checks for identification of faulty Drone components
- **KU10.** various tests and their procedures for checking the Drones
- **KU11.** usage of various tools for repairing the Drone such as multimeter, soldering gun etc.
- **KU12.** techniques for repairing and replacing the faulty drone components
- **KU13.** installation of various types of electronics components in drone
- **KU14.** documentation performed during the entire process
- **KU15.** applicable safety and quality standards during the entire process
- **KU16.** How to Prepare pre and Post flight records
- **KU17.** Importance of Flight Records and their interpretation
- **KU18.** Preparation of Flying records for the Operator.

### **Generic Skills (GS)**

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

- **GS1.** write common words/signs and set phrases used in the work
- **GS2.** prepare checklists, reports and fill out forms in local language or English/ Hindi maintain work related notes and records
- **GS3.** measure various dimensions as per task requirements
- **GS4.** perform arithmetic calculations of addition, subtraction, multiplication and division processes
- **GS5.** read and interpret information (symbols, dimensions, terminology, dates etc.) given language
- **GS6.** read the relevant literature to get the latest updates about the field of work
- **GS7.** communicate politely and professionally









- **GS8.** listen attentively to understand the information being shared
- **GS9.** take quick decisions to deal with work emergencies or accidents
- **GS10.** identify possible disruptions to work and take appropriate preventive measures
- **GS11.** evaluate all possible solutions to a problem to select the best one









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Drone Troubleshooting, Repair & Maintenance and Testing	10	20	10	10
<b>PC1.</b> Select relevant troubleshooting-instruction sheet, tools, equipment for the repair of the Drone	1	-	-	1
PC2. Perform preliminary check-up of the Drone and evaluate the replacement or repair of modules	1	4	-	1
<b>PC3.</b> Review recommended practices for switching on the Drone and the remote controller and standard work practices to disassemble the defective components	1	-	-	1
<b>PC4.</b> Inspect the functional components of a drone thoroughly using required components	1	4	-	1
<b>PC5.</b> Identify electronic components that are malfunctioning and need to be repaired / replaced	1	4	3	1
<b>PC6.</b> Perform repair of the defective components as per company specified maintenance Guidelines	1	4	3	1
<b>PC7.</b> Install repaired / fresh electronic components using appropriate tools and equipment	1	4	4	1
<b>PC8.</b> Assemble the Drone components as per desirable industry practices	1	-	-	1
<b>PC9.</b> Assess that the Drone is working effectively post repair and maintenance	1	-	-	1
<b>PC10.</b> Perform standard safety checks of the Drone post repair and maintenance	1	-	-	1
Drone Flying Testing and Activities	-	30	10	10
<b>PC11.</b> Perform a demo run of the Drone to ensure the proper functioning of Drone	-	2	5	-
PC12. Perform all the Preflight checks as per Standard SOP	-	2	5	-
PC13. Flying Exercises: Take off	-	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. Flying Exercises: Hover	-	2	-	1
PC15. Flying Exercises: Gentle Turns	-	2	-	1
PC16. Flying Exercises: Medium and steep turns	-	2	-	1
PC17. Flying Exercises: Level Out	-	2	-	1
PC18. Flying Exercises: Disorientation and recovery	-	2	-	1
<b>PC19.</b> Flying Exercises: Climbing and Climbing turns	-	2	-	1
<b>PC20.</b> Flying Exercises: Descend and Descending turns	-	2	-	1
PC21. Flying Exercises: Circuit Flying	-	3	-	1
PC22. Flying Exercises: Abnormal/ Emergency Procedure	-	3	-	1
PC23. Flying Exercises: Practical Forced Landing	-	4	-	1
NOS Total	10	50	20	20









# **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N7009
NOS Name	Drone Testing and Maintenance
Sector	Electronics
Sub-Sector	E-Mobility and Battery
Occupation	After Sale Support-EM&B
NSQF Level	3
Credits	4
Version	1.0
Last Reviewed Date	NA
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023









### **ELE/N9972: Communicate and coordinate effectively with others**

### **Description**

This unit is about effective, respectful communication and coordination with supervisors and colleagues

### Scope

The scope covers the following:

- Communicate effectively with supervisor and colleagues
- Respect gender and ability differences

#### **Elements and Performance Criteria**

### Communicate effectively with supervisor and colleagues

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

- **PC1.** communicate potential hazards of a particular location
- PC2. comply with organisation's policies and procedures for working with colleagues
- PC3. maintain personal hygiene and professional appearance
- **PC4.** seek clarification on the information provided by supervisor, if needed
- **PC5.** respect the personal and professional space of colleagues and superiors
- **PC6.** report work completed as per the schedule to superior and inform of any deviations or anomalies
- **PC7.** analyse and act on feedback received from supervisor

#### Respect gender and ability differences

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

- PC8. work depicting proper behaviour towards all genders and people with disability
- **PC9.** identify acts of discrimination and sexual harassment and report to concerned authorities

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** importance of personal grooming
- **KU2.** organisation's policy on code of conduct
- **KU3.** organisation's reporting structure and documentation policy
- **KU4.** how to communicate effectively through all means including face-to-face, telephonic as well as written
- **KU5.** different types of information that colleagues might need and the importance of providing the same as and when required
- **KU6.** rights and duties w.r.t PwD at workplace
- **KU7.** organisation policies and standards to support PwD









- **KU8.** gender and disability based concepts or issues such as social and cultural bias, gender roles stereotypes, gender inequality and discrimination, especially for women and transgender
- **KU9.** organisation grievance redressal mechanisms and related legislations
- **KU10.** health and safety precautions for all individuals, including PwD at workplace

### **Generic Skills (GS)**

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

- **GS1.** listen actively and carefully in all interactions
- **GS2.** communicate politely under all circumstances
- GS3. report potential areas of disruptions to work process in writing or in person
- **GS4.** maintain positive and effective relationships with others
- **GS5.** decide when to report to supervisor and when to deal with a colleague depending on the type of concern
- **GS6.** receive and act on supervisor's feedback in a constructive manner
- **GS7.** speak, listen, and write using gender-inclusive or gender-neutral terms and gestures
- **GS8.** be aware and accountable of ones own gender identity and role, as well as beliefs and practices about disability









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Communicate effectively with supervisor and colleagues	27	51	-	-
<b>PC1.</b> communicate potential hazards of a particular location	4	7	-	-
<b>PC2.</b> comply with organisation's policies and procedures for working with colleagues	4	7	-	-
<b>PC3.</b> maintain personal hygiene and professional appearance	4	7	-	_
<b>PC4.</b> seek clarification on the information provided by supervisor, if needed	4	8	-	-
<b>PC5.</b> respect the personal and professional space of colleagues and superiors	3	8	-	-
<b>PC6.</b> report work completed as per the schedule to superior and inform of any deviations or anomalies	4	7	-	-
<b>PC7.</b> analyse and act on feedback received from supervisor	4	7	-	-
Respect gender and ability differences	8	14	-	-
<b>PC8.</b> work depicting proper behaviour towards all genders and people with disability	4	7	-	-
<b>PC9.</b> identify acts of discrimination and sexual harassment and report to concerned authorities	4	7	-	-
NOS Total	35	65	-	-









# **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N9972
NOS Name	Communicate and coordinate effectively with others
Sector	Electronics
Sub-Sector	Generic
Occupation	Generic - Organizational Behaviour
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	24/02/2022
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023









### **DGT/VSQ/N0102: Employability Skills (60 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.** identify employability skills required for jobs in various industries
- PC2. identify and explore learning and employability portals

#### Constitutional values - Citizenship

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

- **PC3.** 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.
- **PC4.** follow environmentally sustainable practices

#### Becoming a Professional in the 21st Century

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

- **PC5.** recognize the significance of 21st Century Skills for employment
- **PC6.** 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

#### Basic English Skills

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









- **PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- **PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- **PC9.** 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:

- PC10. understand the difference between job and career
- **PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

#### Communication Skills

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

- **PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- **PC13.** work collaboratively with others in a team

### **Diversity & Inclusion**

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

- PC14. communicate and behave appropriately with all genders and PwD
- PC15. 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:

- **PC16.** select financial institutions, products and services as per requirement
- **PC17.** carry out offline and online financial transactions, safely and securely
- **PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- **PC19.** 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:

- **PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22. use basic features of word processor, spreadsheets, and presentations

#### Entrepreneurship

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

- **PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- **PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- **PC25.** 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:

- **PC26.** identify different types of customers
- PC27. identify and respond to customer requests and needs in a professional manner.









#### **PC28.** follow appropriate hygiene and grooming standards

#### Getting ready for apprenticeship & Jobs

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

- PC29. create a professional Curriculum vitae (Résumé)
- **PC30.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC31. apply to identified job openings using offline /online methods as per requirement
- PC32. answer questions politely, with clarity and confidence, during recruitment and selection
- PC33. 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.** 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 and use applications such as word processors, spreadsheets etc.
- **KU16.** how to identify business opportunities
- **KU17.** types and needs of customers
- **KU18.** how to apply for a job and prepare for an interview
- **KU19.** 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
- **GS2.** communicate effectively using appropriate language in formal and informal settings









- **GS3.** behave politely and appropriately with all
- **GS4.** how to work in a virtual mode
- **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	-	-
<b>PC1.</b> identify employability skills required for jobs in various industries	-	-	-	-
<b>PC2.</b> identify and explore learning and employability portals	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
<b>PC3.</b> 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.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	2	4	-	-
<b>PC5.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC6.</b> 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	-	-	-	-
Basic English Skills	2	3	-	-
<b>PC7.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
<b>PC8.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC9.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Career Development & Goal Setting	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> understand the difference between job and career	-	-	-	-
<b>PC11.</b> prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
Communication Skills	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
Diversity & Inclusion	1	2	-	-
<b>PC14.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	2	3	-	-
<b>PC16.</b> select financial institutions, products and services as per requirement	-	-	-	-
<b>PC17.</b> carry out offline and online financial transactions, safely and securely	-	-	-	-
<b>PC18.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Essential Digital Skills	3	4	-	-
<b>PC20.</b> operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
<b>PC21.</b> use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
<b>PC22.</b> use basic features of word processor, spreadsheets, and presentations	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Entrepreneurship	2	3	-	-
<b>PC23.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC24.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC25.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
Customer Service	1	2	-	-
PC26. identify different types of customers	-	-	-	-
<b>PC27.</b> identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC30.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC31.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC32.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC33.</b> 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/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	NA
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023

# Assessment Guidelines and Assessment Weightage

### **Assessment Guidelines**

Same as mentioned in QP

Minimum Aggregate Passing % at QP Level: 50

(**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
ELE/N7008.Theoretical Concept of Drone Technology	48	20	0	29	97	20
ELE/N7007.Practical Aspect of Drones and Simulation Techniques	20	50	20	10	100	20
ELE/N7009.Drone Testing and Maintenance	10	50	20	20	100	20
ELE/N9972.Communicate and coordinate effectively with others	35	65	-	-	100	20
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	20
Total	133	215	40	59	447	100









# **Acronyms**

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications 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.