

# **Assessment Evidence Guide**

## **For**

# **“Urban Area Planning and Management”**

**Level-3**

**(Summative Assessment)**

**28<sup>th</sup> March – 1<sup>st</sup> April 2022**



**National Vocational & Technical  
Training Commission**

|                                                                                                                                                                                                                                                                                 |                                                                          |                 |                    |
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| <b>Title of Qualification:</b><br>National Vocational Certificate Level 3 in Urban Area Planning and Management “Assistant Supervisor”                                                                                                                                          | <b>CS Code:</b>                                                          | <b>Level: 3</b> | <b>Version: 01</b> |
| <b>Competency Standard Title:</b><br>Maintain Safety at Workplace<br>Process Consumer Complaint<br>Perform Basic Plumbing<br>Produce Civil Engineering Drawings<br>Prepare Rough Cost Estimation<br>Collect and Organize Field Survey Data<br>Perform Basic Survey and leveling | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time: 4 hrs.</b> |                 |                    |

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Candidate Details         | Name: .....<br><br>Registration/Roll Number: .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Guidance for Candidate    | <p><b>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration &amp; assessment):</b></p> <p><b>Assessment Task 1:</b> Candidate is required to perform profile and cross section leveling on a specific strip of land, draw profile, cross sections, mark formation level, formation width, side slope for the proposed road on it and calculate the earthwork and prepare rough cost estimate.</p> <p><b>Assessment Task 2:</b> Candidate is required to segregate the collected given field survey data and organize by using e-learning tools and present graphically.</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li><b>Knowledge assessment test (Written or Oral)</b></li> <li><b>Portfolios at the time of assessment (if any)</b></li> </ol>                                                                                                                                                                 |
| Minimum Evidence Required | <p>During a practical assessment, under observation by an assessor, you will complete:</p> <p><b>Assessment Task 1</b></p> <p>Performance Criteria 1: Select the required tools and equipment</p> <p>Performance Criteria 2: De-mark the center line and cross sections at appropriate distance</p> <p>Performance Criteria 3: Perform temporary adjustment of level near permanent benchmark</p> <p>Performance Criteria 4: Draw the table for entering the staff reading</p> <p>Performance Criteria 5: Take staff readings on centre line and cross section points</p> <p>Performance Criteria 6: Calculate reduced levels</p> <p>Performance Criteria 7: Apply arithmetic checks</p> <p>Performance Criteria 8: Draw the profile</p> <p>Performance Criteria 9: Draw cross section</p> <p>Performance Criteria 10: Calculate area of road site.</p> <p>Performance Criteria 11: Calculate the volume of earthworks</p> <p>Performance Criteria 12: Calculate volume of sub base and base course of road</p> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Performance Criteria 13: Calculate area of surfacing</p> <p>Performance Criteria 14: Measure items of road marking and sign boards.</p> <p>Performance Criteria 15: Prepare abstract of cost.</p> <p>Performance Criteria 16: Wear PPE according to job</p> <p>Performance Criteria 17: Perform tasks within standard timeframe</p> <p><b>Assessment Task 2</b></p> <p>Performance Criteria 1: Identify resources for information</p> <p>Performance Criteria 2: Select PPE according to job</p> <p>Performance Criteria 3: Wear PPE according to job</p> <p>Performance Criteria 4: Select the required source</p> <p>Performance Criteria 5: Collect the data</p> <p>Performance Criteria 6: Segregate collected data</p> <p>Performance Criteria 7: Record the data in required format</p> <p>Performance Criteria 8: Record the data outcome</p> <p>Performance Criteria 9: Perform tasks within standard timeframe</p>                                                                                                                                                                                                                                                       |
|  | <p><b>Portfolios required at the time of assessment (if any) for</b></p> <ol style="list-style-type: none"> <li>1. Folder includes set of submission drawings and layout plan</li> <li>2. Folder including plumbing jobs</li> </ol> <p>Performance Criteria 1: Draw required plan with details</p> <p>Performance Criteria 2: Draw required front and side elevation</p> <p>Performance Criteria 3: Draw required site plan, layout plan</p> <p>Performance Criteria 4: Draw required cross section</p> <p>Performance Criteria 5: Draw layout plan for water supply and sanitation for domestic building</p> <p>Performance Criteria 6: Draw services layout plan for a housing society</p> <p>Performance Criteria 7: Draw the details of services structures</p> <p>Performance Criteria 8: Draw cross section of streets</p> <p>Performance Criteria 9: Perform pipe cutting</p> <p>Performance Criteria 10: Perform pipe threading</p> <p>Performance Criteria 11: Perform pipe reaming</p> <p>Performance Criteria 12: Join PPRC pipes using heating tool</p> <p>Performance Criteria 13: Join G.I pipe with socket</p> <p>Performance Criteria 14: Take pipe leakage test</p> |

## Assessors Judgment Guide

|                    |                                                                                                                                                                                |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Candidate Details  | Name: ..... Registration/Roll Number: .....<br><br>Candidate Signature:.....                                                                                                   |
| Assessment Outcome | COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/><br><br>Name of the Assessor: ..... Assessor's code: .....<br><br>Signature of the Assessor:..... |

| Assessment Summary (to be filled by the assessor) |         |      |             |           |           |           |                   |
|---------------------------------------------------|---------|------|-------------|-----------|-----------|-----------|-------------------|
| Activity                                          | Method  |      |             |           |           | Result    |                   |
| Nature of Activity                                | Written | Oral | Observation | Portfolio | Role Play | Competent | Not Yet Competent |
| Practical Skill Demonstration                     |         |      | ✓           | ✓         |           |           |                   |
| Knowledge Assessment                              | ✓       | ✓    |             |           |           |           |                   |
| Other Requirement                                 |         |      |             |           |           |           |                   |

# Observation Checklist

|                                                                        |                                                                      |                                                                                                                                                                                                                                                                                                                      |    |         |
|------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------|
| Each Assessment Task (with performance criteria)                       |                                                                      |                                                                                                                                                                                                                                                                                                                      |    |         |
| <b>Assessment Task 1</b>                                               |                                                                      | <b>Description of Assessment task 1</b><br>Candidate is required to perform profile and cross section leveling on a specific strip of land, draw profile, cross sections, mark formation level, formation width, side slope for the proposed road on it and calculate the earthwork and prepare rough cost estimate. |    |         |
| During the practical assessment, candidate demonstrated the following: |                                                                      | Yes                                                                                                                                                                                                                                                                                                                  | No | Remarks |
| 1.                                                                     | Selected the required tools and equipment                            |                                                                                                                                                                                                                                                                                                                      |    |         |
| 2.                                                                     | De-marked the center line and cross sections at appropriate distance |                                                                                                                                                                                                                                                                                                                      |    |         |
| 3.                                                                     | Performed temporary adjustment of level near permanent benchmark     |                                                                                                                                                                                                                                                                                                                      |    |         |
| 4.                                                                     | Drawn the table for entering the staff reading                       |                                                                                                                                                                                                                                                                                                                      |    |         |
| 5.                                                                     | Taken staff readings on centre line and cross section points         |                                                                                                                                                                                                                                                                                                                      |    |         |
| 6.                                                                     | Calculated reduced levels                                            |                                                                                                                                                                                                                                                                                                                      |    |         |
| 7.                                                                     | Applied arithmetic checks                                            |                                                                                                                                                                                                                                                                                                                      |    |         |
| 8.                                                                     | Drawn the profile                                                    |                                                                                                                                                                                                                                                                                                                      |    |         |
| 9.                                                                     | Drawn cross section                                                  |                                                                                                                                                                                                                                                                                                                      |    |         |
| 10.                                                                    | Calculated area of road site.                                        |                                                                                                                                                                                                                                                                                                                      |    |         |
| 11.                                                                    | Calculated the volume of earthworks                                  |                                                                                                                                                                                                                                                                                                                      |    |         |
| 12.                                                                    | Calculated volume of sub base and base course of road                |                                                                                                                                                                                                                                                                                                                      |    |         |
| 13.                                                                    | Calculated area of surfacing                                         |                                                                                                                                                                                                                                                                                                                      |    |         |
| 14.                                                                    | Measured items of road marking and sign boards.                      |                                                                                                                                                                                                                                                                                                                      |    |         |
| 15.                                                                    | Prepared abstract of cost.                                           |                                                                                                                                                                                                                                                                                                                      |    |         |
| 16.                                                                    | Wore PPE according to job                                            |                                                                                                                                                                                                                                                                                                                      |    |         |
| 17.                                                                    | Performed tasks within standard timeframe                            |                                                                                                                                                                                                                                                                                                                      |    |         |
| Competent <input type="checkbox"/>                                     |                                                                      | Not Yet Competent <input type="checkbox"/>                                                                                                                                                                                                                                                                           |    |         |

|                                                                        |                                           |                                                                                                                                                                                     |    |         |
|------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------|
| Each Assessment Task (with performance criteria)                       |                                           |                                                                                                                                                                                     |    |         |
| <b>Assessment Task 2</b>                                               |                                           | <b>Description of Assessment Task 2</b><br>Candidate is required to segregate the collected given field survey data and organize by using e-learning tools and present graphically. |    |         |
| During the practical assessment, candidate demonstrated the following: |                                           | Yes                                                                                                                                                                                 | No | Remarks |
| 1.                                                                     | Identified resources for information      |                                                                                                                                                                                     |    |         |
| 2.                                                                     | Selected PPE according to job             |                                                                                                                                                                                     |    |         |
| 3.                                                                     | Wore PPE according to job                 |                                                                                                                                                                                     |    |         |
| 4.                                                                     | Selected the required source              |                                                                                                                                                                                     |    |         |
| 5.                                                                     | Collected the data                        |                                                                                                                                                                                     |    |         |
| 6.                                                                     | Segregated collected data                 |                                                                                                                                                                                     |    |         |
| 7.                                                                     | Recorded the data in required format      |                                                                                                                                                                                     |    |         |
| 8.                                                                     | Recorded the data outcome                 |                                                                                                                                                                                     |    |         |
| 9.                                                                     | Performed tasks within standard timeframe |                                                                                                                                                                                     |    |         |
| Competent <input type="checkbox"/>                                     |                                           | Not Yet Competent <input type="checkbox"/>                                                                                                                                          |    |         |

|                                                                        |                                                                         |                                                                                                    |    |         |
|------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----|---------|
| <b>Portfolio</b>                                                       |                                                                         | <b>Description of Portfolio</b>                                                                    |    |         |
|                                                                        |                                                                         | 1. Folder includes set of submission drawings and layout plan<br>2. Folder including plumbing jobs |    |         |
| During the practical assessment, candidate demonstrated the following: |                                                                         | Yes                                                                                                | No | Remarks |
| 1.                                                                     | Drawn required plan with details                                        |                                                                                                    |    |         |
| 2.                                                                     | Drawn required front and side elevation                                 |                                                                                                    |    |         |
| 3.                                                                     | Drawn required site plan, layout plan                                   |                                                                                                    |    |         |
| 4.                                                                     | Drawn required cross section                                            |                                                                                                    |    |         |
| 5.                                                                     | Drawn layout plan for water supply and sanitation for domestic building |                                                                                                    |    |         |
| 6.                                                                     | Drawn services layout plan for a housing society                        |                                                                                                    |    |         |
| 7.                                                                     | Drawn the details of services structures                                |                                                                                                    |    |         |
| 8.                                                                     | Drawn cross section of streets                                          |                                                                                                    |    |         |
| 9.                                                                     | Performed pipe cutting                                                  |                                                                                                    |    |         |
| 10.                                                                    | Performed pipe threading                                                |                                                                                                    |    |         |
| 11.                                                                    | Performed pipe reaming                                                  |                                                                                                    |    |         |
| 12.                                                                    | Joined PPRC pipes using heating tool                                    |                                                                                                    |    |         |
| 13.                                                                    | Joined G.I pipe with socket                                             |                                                                                                    |    |         |
| 14.                                                                    | Taken pipe leakage test                                                 |                                                                                                    |    |         |
| Competent <input type="checkbox"/>                                     |                                                                         | Not Yet Competent <input type="checkbox"/>                                                         |    |         |

## Knowledge Assessment

|                                                                                                                                                                                                                                                                                                                                          |                                                                          |                |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------|-------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 3 in Urban Area Planning and Management “Assistant Supervisor”                                                                                                                                                                                                   | <b>CS Code:</b>                                                          | <b>Level:3</b> | <b>Version:01</b> |
| <b>Competency Standard Title:</b><br>Follow Safety Rules at Site<br>Perform Basic Communication Skills<br>Demonstrate Basic Numeracy Skills<br>Perform Basic Technical Drawing<br>Perform Basic Computer Operations<br>Perform Bench Work<br>Perform Basic Electrical Installation<br>Perform Operation & Maintenance of Pumping station | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> 30 min |                |                   |

| Question                                                | Candidate's answer |
|---------------------------------------------------------|--------------------|
| 1. PPE stand for?                                       |                    |
| 2. What is Feedback?                                    |                    |
| 3. Enlist any five Verbal communication techniques?     |                    |
| 4. PPRC stands for?                                     |                    |
| 5. What is difference between PPRC pipes and G.I pipes? |                    |
| 6. Define site plan                                     |                    |
| 7. Define Plinth area                                   |                    |
| 8. State the different types of specification           |                    |
| 9. What is primary data?                                |                    |
| 10. What is secondary data?                             |                    |
| 11. How to collect field data?                          |                    |
| 12. Define quantitative data                            |                    |

| Question                       | Candidate's answer |
|--------------------------------|--------------------|
| 13. Define plane table survey. |                    |
| 14. What is compass survey?    |                    |
| 15. What is contour line?      |                    |

### **ANSWER KEY**

| <b>Sr.</b> | <b>Answers</b>                                                                                                                                                                                                                                                                                |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1.</b>  | Personal Protective Equipment                                                                                                                                                                                                                                                                 |
| <b>2.</b>  | Information about reaction to a person's performance on a task or a product.                                                                                                                                                                                                                  |
| <b>3.</b>  | <ul style="list-style-type: none"> <li>• Active listening</li> <li>• Clarity and conciseness</li> <li>• Confidence</li> <li>• Empathy</li> <li>• Friendliness</li> <li>• Open-mindedness</li> <li>• Giving and soliciting feedback</li> <li>• Confidence</li> <li>• Respectfulness</li> </ul> |
| <b>4.</b>  | Polypropylene random co-polymer.                                                                                                                                                                                                                                                              |
| <b>5.</b>  | PPRC pipes are non-metallic pipes and GI pipes are metallic pipes. PPR pipes light weight and GI pipes are heavy in weight.                                                                                                                                                                   |
| <b>6.</b>  | It is a drawing which shows existing and proposed conditions for a given area which is to be modified.                                                                                                                                                                                        |
| <b>7.</b>  | It is defined area of a building measured at floor level. It is measured by taking external dimensions excluding plinth offset if any.                                                                                                                                                        |
| <b>8.</b>  | <ul style="list-style-type: none"> <li>• General or brief specification</li> <li>• Detailed specification</li> <li>• Standard specification</li> </ul>                                                                                                                                        |
| <b>9.</b>  | Primary data is a type of data that is collected by researchers directly from main sources through interviews, surveys, experiments, etc                                                                                                                                                      |
| <b>10.</b> | Secondary data means data collected by someone else earlier.                                                                                                                                                                                                                                  |
| <b>11.</b> | Interviews,<br>Surveys,<br>Questionnaires,<br>Observations,<br>Ethnographies,<br>Oral histories, or case studies, or reviewing documents and records                                                                                                                                          |
| <b>12.</b> | Quantitative data is expressed in numbers and graphs and is analyzed through statistical methods.                                                                                                                                                                                             |
| <b>13.</b> | Plane table surveying is a graphical method of survey in which the field observations and plotting are done simultaneously                                                                                                                                                                    |
| <b>14.</b> | Compass surveying is a type of surveying in which the directions of surveying lines are determined with a magnetic compass                                                                                                                                                                    |
| <b>15.</b> | A contour line may also be defined as the intersection of a level surface with the surface of the earth.                                                                                                                                                                                      |